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ABSTRACT

This guide is designed to give advanced or upper-level consumer and homemaking education students a chance to take a futuristic look at the roles they will have as consumers in the next years. Divided into 12 units, the first three cover the consumer, the family, and consumer responsibilities. The next eight units are on the goods and services purchased by individuals and families, including transportation, clothing, housing and home furnishings, household equipment, food, child care, medical care, and entertainment. Unit 12 deals with consumer practices. Each unit includes numerous predictions for the future gleaned from a variety of sources and activities designed to enable students to gain a firsthand look at implications of various trends for their lives. Activities encourage students to seek information, analyze trends, and anticipate possible effects on their own lives. The 69 activities include puzzles, worksheets, case situations, calculations, charts, interviews, and experiments. Units may be used together or independently. All or part of the activities may be used, and some of the more involved actixites could be completed as group assignments or extended learning experiences. Answer keys and references are provided. (YLB)

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PREFACE

Consuming in the Eighties and Beyond has been designed to give Consumer and Homemaking Education students a chance to take a futuristic look at the roles they will have as consumers in the next few years. Its purpose is twofold: to provide information on product, service, and consumption trends; and to provide a variety of activities to encourage students to consider the potential impact of these trends on their lives.

The guide is divided into twelve units. Included are units on the consumer, the family, consumer responsibilities, and consumer practices. Also included are units on the goods and services purchased by individuals and families including transportation, clothing, housing and home furnishings, household equipment, food, child care, medical care, and entertainment.

Each unit includes numerous predictions for the future gleaned from a variety of sources and activities designed to enable students to gain a firsthand look at implications of various trends for their lives. Activities encourage students to seek information, analyze trends, and anticipate the possible effects on their own lives. The activities include puzzles, worksheets, case situations, calculations, charts, interviews, experiments, and more.

The information and activities are most appropriate for advanced or upper level students. The concepts can be integrated into the subject areas of Consumer and Homemaking Education or taught in a specialized consumer education unit or course. The units may be used together or independently. All or part of the activities may be used as the reader chooses.

Some of the more involved activities could be completed as group assignments or as extended learning experiences. Use of some activities as group assignments may expand the range of ability levels for which the activities are appropriate. This approach may be particularly useful if some students have difficulty completing written assignments. Use of some activities as extended learning experiences may increase their usefulness in small rural communities which have fewer resources available within the community. In such communities it may also be necessary to invite resource persons to the community, to plan field trips, to obtain information, or to allow extra time for completion of projects. Many of the activities can easily be adapted to the needs of the students and community.

This publication should aid both students and teachers in taking a new approach to consumer education. Utilization of the information and activities provided should help make consumer education more relevant today and provide tools students can use to analyze the potential impact of trends they encounter in the future.

The Increasingly Visible Consumer

- Consumers today
- Consumers tomorrow
- Changing consumer environments

CONSUMERS TODAY

- During the decade of the 70's the following became realities for consumers:
  - ◻ Inflation increased.
  - ◻ Energy cost more.
  - ◻ The Gross National Product showed a lower growth rate.
  - ◻ Consumer confidence decreased.
  - ◻ International policies increasingly affected resource availability.
  - ◻ Availability of capital became uncertain.
  - ◻ Belief in resources conservation and environmental protection increased.

- More women work outside the home than ever before in our country's history. The percentage of married women in the labor force increased from 15 percent in 1940 to 24 percent in 1950, 31 percent in 1960, 41 percent in 1970, and 51 percent in 1980. For the first time married women who work outside the home outnumber full-time homemakers. Over 42 percent of employed women are the sole support of families. These changes have resulted in increased spending for child care, transportation, clothing, and convenience products. These changes are also increasing the amount of time men and children spend in homemaking and child care.

- The increase in dual-income families is changing the marketplace. Families have more income to spend. Store hours have lengthened to accommodate the hours of working couples. Service hours and banking hours have also changed.

- Families are having fewer children. The decision to have fewer children results from the increased cost of having and raising children, changes in life styles, and concern about the environmental effects of overpopulation.

- Family values are changing. More money is being spent for self-fulfillment, leisure, and equal opportunity.

- Today's consumers have more luxuries than ever before in history. Virtually all households in the U.S. have a refrigerator and a gas or electric range. Seventy-six percent have a clothes washer and 37 percent have a dishwasher. Microwave oven sales were up 12 percent in 1979. Ninety-eight percent of U.S. households have television sets. The sale of video-cassette recorders has doubled since 1977, and in 1979 $100 million was spent on home computers. Electronic game sales have also jumped. By 1990, the amount of money available for luxuries is expected to swell further.

- Inflation . . . recession . . . depression. Consumers seem bombarded with economic words and ideas. Today's young adults are growing into full-fledged consumers in an era characterized by inflation, unemployment, materials shortages, pollution problems, energy demands, and government regulations. Consumers are torn between the "wants" which are stimulated by marketing and the "oughts" related to what will be good for the environment.

- Consumers are motivated by different drives. Consumers may combine these drives or exhibit different ones in different situations. The drives are:
  - ◻ need driven—purchasing mostly necessities and saving little;
  - ◻ belonger oriented—purchasing material goods for benefit of family and looking for savings, especially when purchasing "big" items;
  - ◻ achievement oriented—purchasing the latest, new, improved products, perhaps to keep up with the Joneses, using them frequently for a short time and then disposing of them; and
  - ◻ inner directed—concerned with pollution, energy, nutrition, and consumption patterns while purchasing natural foods, country decoration items, natural fiber clothing, small cars, medium-sized homes, and long-lasting consumer goods.

CONSUMERS TOMORROW

- One futurist describes three types of consumers spanning the 20th century and moving toward the 21st century. The three types are the industrial age consumer, the transitional consumer, and the post-industrial age consumer. The characteristics of each are listed on the next page. While these characterizations do not fit all consumers in any given era, they do indicate trends that have occurred or will occur in the U.S.

The industrial age consumer:

- typically reached adulthood between 1920 and 1960, was socialized into seeking "The American Dream" stressing ownership of material possessions, private dwellings and transportation, conveniences, and relatively small nuclear families;
- accepted the "more is better" life orientation;
- was job-oriented;
- thought little about the impact of his or her own consumption upon society or the environment; and
- was oriented toward solving consumer problems by earning more money in order to be able to spend more money.

The transitional consumer:

- reached or will reach adulthood between 1960 and perhaps 1990;
- is making the most of his or her early adulthood consumption decisions in an era characterized by inflation, material shortages, pollution problems, energy crises, and unprecedented government regulation of the marketplace;
- is torn between the wants stimulated by industrial age marketing mechanisms and the "oughts" supportive of societal/environmental concerns; and
- is equally concerned with his or her job and efficient consumption decisions but seldom concerned with social consequences of his or her economic actions.

The post-industrial age consumer will:

- reach adulthood sometime after the year 1990;
- be concerned primarily with efficient and responsible consumption;
- realize that saving a marginal dollar through efficient consumption is superior to earning a marginal dollar of income (due to the tax effect); and
- insist upon buying only those products supportive of the ecosystem in which she or he lives.

- Most people will try to maintain and enhance their levels of consumption, despite increasing costs.

- Consumers may change their consumption patterns by individualizing their purchasing patterns, treating their own problems, doing it themselves, and increasing their home production and self-sufficiency.

- Consumers who will reach adulthood sometime after the year 1990 are predicted to be increasingly concerned with being efficient and responsible consumers. These consumers will mostly buy products supportive of the environment in which they live. They will be aware of the impact their behavior as consumers has on the world.

CHANGING CONSUMER ENVIRONMENTS

- By 1990, nearly 40 percent of the 67 million American families will be earning more than $25,000 a year, in 1977 dollars. This fortunate group will command more than 60 percent of the nation's disposable income. The total available for spending on frills and fancies will swell impressively, even while outlays on necessities (including food consumed at home, shelter, utilities, clothing, transportation, and medical services) are growing too.

- Real increases in consumer spending averaging 3.7 percent a year have been predicted over the decade to come.

- Consumers need to increase their understanding of the political and economic factors which affect them, including the Gross National product, the Consumer Price Index, government regulations, the money supply, interest rates, and standard of living.

- Predictions for the future indicate a new way of life based on:
  - diversified, renewable energy sources—coal, nuclear, solar, wind, and hydro energy;
  - methods of production using electronics and computers that make most factory assembly lines obsolete;
  - new industries in the fields of space, ocean, and biology;
  - new, non-nuclear families—fewer than two children, adult-centered homes, one-parent households, aggregate families or reconstituted families, or other family forms;
  - a novel institution that might be called the "electronic cottage" involving radically changed homes, schools, and corporations;

  - media utilizing faster image processing—cable TV, videogames, information services, video-cassette players, domestic satellite—to reach more specialized audiences;
  - computer intelligence in the home, factory and business;
  - more custom goods and services;
  - increased speed of decision making;
  - shorter product life cycles;
  - small groups of people or mini-markets that demand more options, models, types, sizes, colors, and customization from producers than the large, mass markets of the past.

- Consumers of the future can also expect more:
  - leasing and renting;
  - frequent buying and selling;
  - short-lived consumption patterns;
  - fads;
  - customized or personalized goods and services;
  - training time for workers (who must continually adjust to new products);
  - frequent changes in contracts;
  - negotiations and legal work;
  - price changes;
  - job turnovers;
  - dependence on data; and
  - special purpose organizations.

- For the consumer, these changes may mean longer shopping and service hours, more fast food shops, increased banking hours, consumer involvement in production of goods and services, and less standardization of prices.

- Scarcity of natural resources is likely to pose real problems for future consumers resulting in a very different world than we know today.

- The purpose of the free enterprise system is to satisfy consumers' wants. However, our economic system is not without problems. Controlling or finding solutions to these problems is part of the philosophy of our free enterprise system. Problems which have continued or recurred throughout the history of our economy include:
  - recession which interferes with economic growth;
  - poverty in the midst of plenty; and
  - chronic unemployment which is a major cause of poverty.

1.

MIRROR, MIRROR ON THE WALL

In the years ahead, people will be challenged to examine the values that underlie their patterns of buying and develop new solutions to improve the quality of life. These changes will happen because of inflation, scarcity, interdependence of people, and pollution of the environment.

Changes in financial management with emphasis on sharing and cooperation will occur. Perhaps a greater commitment to conservation and a return to a simpler lifestyle will be likely responses to current problems.

Directions:
Locate and read a prediction about the future. (Use any book or magazine about future America as a basis. See the reference list at the end of this guide for suggestions.) The prediction might deal with areas such as housing, food, resources, families, energy, clothing, or social relationships. Record what you read by answering the questions below.

1. What is the prediction?

2. What was the source of the prediction?

3. Identify the changes implied in the prediction?

4. What parts of the prediction are good?

5. What parts of the prediction would be unfavorable?

6. If you could change the prediction, how would you change it? Rewrite the prediction below to reflect the future as you would like to see it.

Note: Compare your responses with those of your classmates. How do your ideas differ to match those of your classmates.

2.

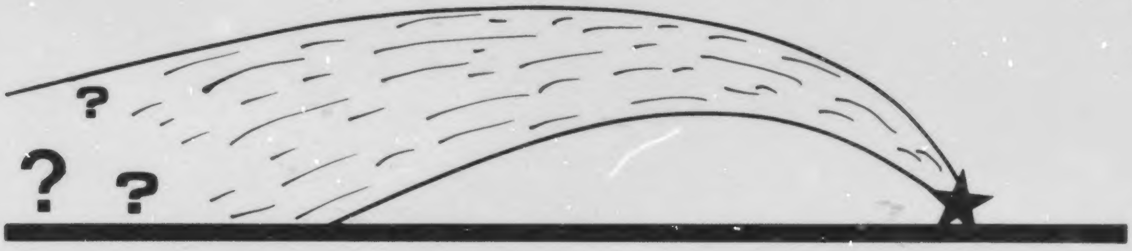
WHAT WILL THE FUTURE BE ?

Directions:
Select one prediction for the future (year 2000 or beyond) and describe ten ways the prediction could affect you as a consumer.

Prediction:

Effects on the consumer:

1. ______________________________
2. ______________________________
3. ______________________________
4. ______________________________
5. ______________________________
6. ______________________________
7. ______________________________
8. ______________________________
9. ______________________________
10. ______________________________



3.

CRYSTAL BALL GAZING

Directions:
Spend a few minutes thinking about what the future may be like. Jot down your predictions for each of the following.

1. families ______
2. housing ______
3. food ______
4. clothes ______
5. recreation and leisure ______
6. work ______
7. fitness ______
8. energy ______
9. medical technology ______
10. electronics and computers ______
11. industry ______
12. politics ______
13. education ______
14. the U.S. economy ______
15. transportation ______
16. other ______

4. WHATEVER WILL BE WILL BE

Directions:

Choose one of the following stages in the consumer life cycle: childhood; adolescence; early singlehood; mature single; newly-married couple (young, no children); young family (youngest child under six); maturing family (youngest child older than six); single parent family; older married working couple (no children at home); older married retired couple (no children at home); older solitary survivor (in labor force); or older solitary survivor (retired). Include other types of families you might observe.[1]

In the chart below, write the name of the life cycle stage you selected. Then describe the consumer elements associated with the stage.

CONSUMER ELEMENT	**STAGE** ______________
Level of resources (time, income, human energy)	
Marketplace knowledge and skills	
Typical products and services purchased	
Typical marketplace problems	

How do consumers differ at these stages of the consumer life cycle?

---

[1] Stampfl, Ronald W. "The Consumer Life Cycle." *The Journal of Consumer Affairs*, Winter 1978, pp. 214–215.

5.

FUTURE GOALS

Directions:

Make a list of your consumer goals for now, next year, and in the future. (Examples: now–a new sweater; next year–a used car; in the future–college education.) Try to list at least three goals for each period. Estimate the amount of money you will need to reach each goal you list. Then total each amount column.

Now		Next Year		In The Future	
Goals	Amount	Goals	Amount	Goals	Amount

Total ______ Total ______ Total ______

6.

MAYBE SOMEDAY . . .

Directions:
Everyone has dreams, and some people attain their dreams. Others never quite seem to get there. Some people set goals and make a plan for reaching them. This activity is meant to help you identify some of your goals. List five goals in each column below.

Places you would like to see by the year 2000	Books you would like to read by the year 2000	Skills you would like to learn by the year 2000	Things you would like to be known for in the year 2000

1. What will I need in order to accomplish these goals?

2. Pick the one goal you would like to reach first. Write it below.

3. What are some factors necessary in setting up a time schedule that would make this goal realistic?

7.

ECONOMIC HAPPENINGS

Directions:
Study the news or financial pages of your local newspaper to find three news items describing what is happening in our economy. Choose one local event, one area or state event, and one national event. Possible topics might be:

- prices and sales
- supply and demand
- employment
- inflation/deflation
- government influences
- energy
- taxes
- international affairs
- politics
- investments

Write a brief *description* of each event and predict its *effect* on consumers. Use the spaces provided below.

Event 1: (local)

Event 2: (area or state)

Event 3: (national)

8.

UNCLE SAM SHARES THE FUTURE

Directions:
Identify three current trends in government legislation. Use interviews, television, radio, and newspapers as sources. Give two examples of ways each trend may affect consumers in the future.

Trend	Examples
1. ____________________	a. ____________________
	b. ____________________
2. ____________________	a. ____________________
	b. ____________________
3. ____________________	a. ____________________
	b. ____________________

9.

CHANGING SERVICES

Directions:

Interview three people of different ages in your community. Try to find people with at least ten years difference in age. Ask them the following questions:

1. When did you start paying taxes other than sales tax?

2. How have services provided by the governement changed since you began to pay taxes?

3. Do you favor passing a law to reduce taxes and government spending in your state? Why?

In the space below, summarize the differences and similarities you found in the responses of the persons you interviewed.

10.

ARE YOU A PUPPET ON ADVERTISERS' STRING?

Directions:
Clip five advertisements for different types of products. Record information about the advertisements in the chart below.

Product	Message to Consumer	Goal of Ad	Prime Audience	Your Reaction	Would You Purchase the Product?

11.

A JOB IN YOUR FUTURE

Directions:
Refer to the latest edition of *The Occupational Outlook Handbook.* (Most school counselors have a copy of this book.) Select two occupations to review. Record information about the occupations in the spaces below.

Occupation 1

Number of Workers

Average Pay

Education Required

Need for Future Workers

Occupation 2

Number of Workers

Average Pay

Education Required

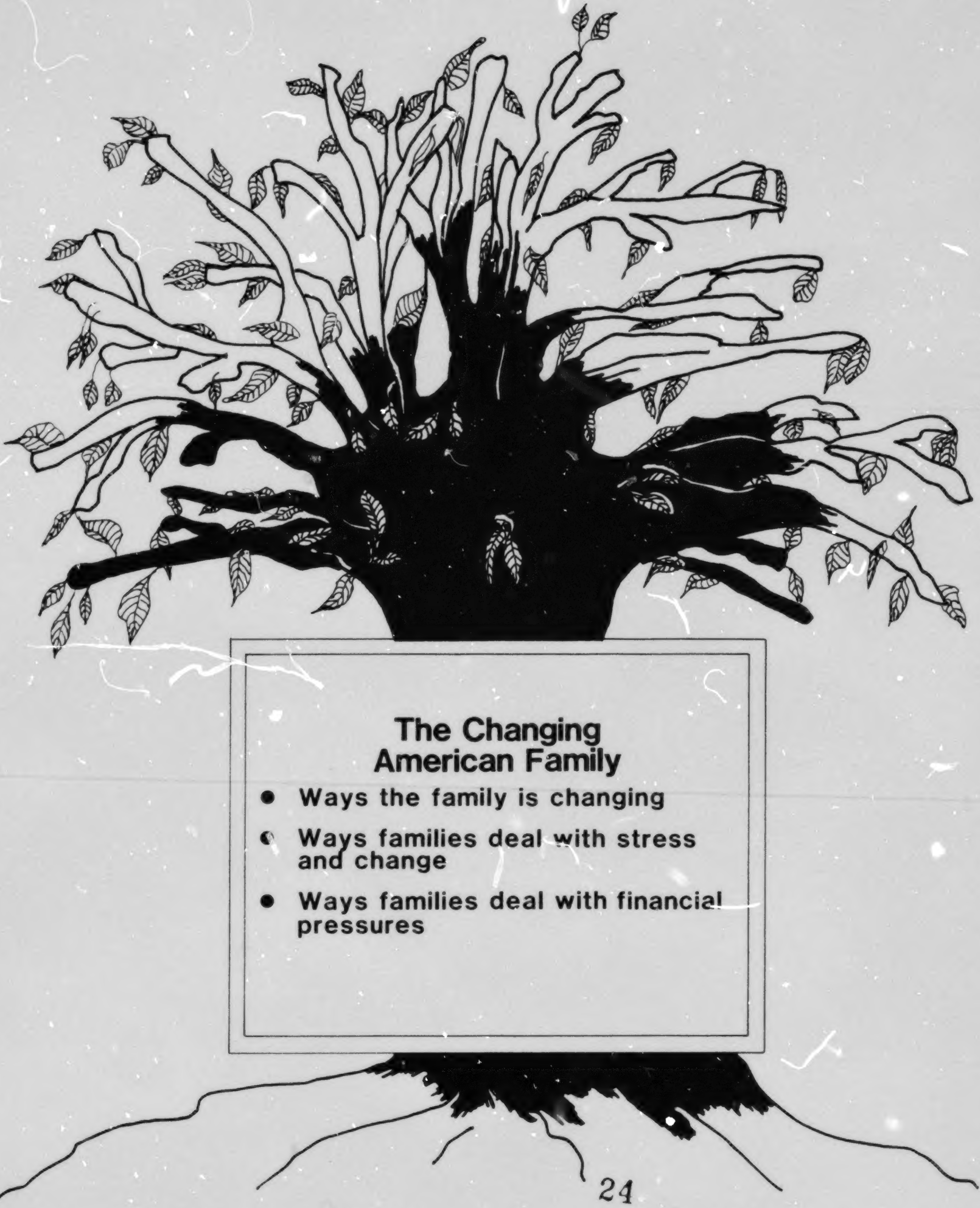
Need for Future Workers

A JOB IN YOUR FUTURE (CONT.)

Directions:
Answer the questions below based on your findings.

1. Which of the two occupations do you feel offers the most promising future? Why?

2. Why is it important to keep up with occupational trends?



The Changing American Family

- Ways the family is changing
- Ways families deal with stress and change
- Ways families deal with financial pressures

WAYS THE FAMILY IS CHANGING

- Fundamental tasks of families will remain the same as in the past. Families will continue to go through a step-by-step process of being founded, establising an income and a home, caring for and nurturing children, and handling stress and crisis.

- There will probably continue to be a decline in formal dating. Traditional socializing between couples has given way to groups of young people who attend social functions rather than couples going to these activities. Beyond high school, there is a trend toward some traditional dating with males doing the asking and paying for the date. Dates will continue to be unchaperoned.

- No longer is marriage the goal of dating. Instead young people are looking for a "social life."

- Couples will probably marry later. This may help form more stable unions since the partners enter the marriage with more maturity and more definite goals.

- More people are living alone. According to the U.S. Census, the reasons for this include: women outlive their husbands, more young women are supporting themselves before marriage, more people are going to college, and divorce rates are rising. According to the Census report, even such things as convenience foods and easy-care clothes have made being single easier.

- The purpose of marriage has changed. In the past, marriage was viewed as something one did as a duty to family and society. Today, people are marrying for personal satisfaction with less thought about what others think.

- There will be several forms of families in the future. No longer will two parents with two children be a typical family. Single-parent families and extended families (which include, cousins, grandparents, etc., all living in the same home) are occurring more frequently. There will continue to be a prevalence of dual-earner families and women will be the sole income producers in many of tomorrow's families.

- The current U. S. birth rate is 1.9 children per woman, which is less than the replacement level for the population.

- With people living longer, there will be a tendency to remarry. Couples will blend together families with an assortment of grandparents, aunts, uncles, and former in-laws. Because of this blending of families, society will redefine what is meant by the term *family*.

- A panel of five experts at a Population Reference Bureau seminar in February 1982 predicted the following family trends for the 1980s:
  - ☐ The fertility rate, now at a near-record low, will remain low for the next few years, but an echo baby-boomlet may yet occur.
  - ☐ As many as 25 percent of women now in their twenties may remain childless.
  - ☐ Life expectancy for U.S. males will exceed 70 years, rising from 69.5 years in 1978 to 71.9 in 1990. Female life expectancy will reach 80 years by 1990 (compared with 77.2 years in 1978).
  - ☐ By 1990, unmarried couples living together will constitute 7 percent of all couple households, compared with 3.5 percent in 1981.
  - ☐ The proportion of children under 18 living with one parent will continue to increase, reaching 25 percent in 1990, compared with 20 percent in 1980.

WAYS FAMILIES DEAL WITH CHANGE

- Despite evidence of increased marital instability, the U. S. Department of Commerce *Index of Social Indicators* reports that Americans expressed great satisfaction with their families.

- Some futurists believe that the number of divorces will increase. However, this increase will have less of a traumatic effect on the children of marriages of the future than on children of marriages of the past since patterns of satisfactory divorce recovery have been established.

- In the past, the husband/father has been the traditional "deserter" of a family. Now, say some private detectives who specialize in finding runaways, wives/mothers are beginning to outnumber runaway husbands.

- The number of one-parent families in the United States doubled between 1970 and 1981 according to the U.S. Census Bureau. About one of five of the nation's 31.6 million children now lives with only one parent.

- Legislation which will help ease the trauma of divorce will help couples share equally in the custody of children and division of property.

- There may be an emphasis on family issues in national policy and law. In addition to government-sponsored child care centers, government funding will be available for job training for displaced homemakers. There will be stricter requirements in divorce standards for tracking down runaway parents who are not paying child support.

- The declining birthrate in the 1960's and 1970's will tighten the U.S. labor market in the 1980's and 1990's. This will result in higher wages, lower unemployment, an increase in women workers, delayed retirement of older workers, and more documented and undocumented immigration. These predictions are from a new Rand Corporation research report, "Demographic Challenges in America's Future."

- Increasing specialization in work has meant that family members must travel farther from home in order to earn a living, thus reducing the amount of time a family could spend together. This has caused some families to place greater emphasis on the quality of the time spent together.

- More people will be living in densely populated cities in the next few years. Some people will have very limited personal space. This space will be arranged with barriers to provide privacy and security. Some people will opt for a life style in an area of low population density.

- Many of the services which were once done in the home by family members are now done professionally. These include child care, housecleaning, food preparation, and entertainment.

- As the baby-boomers mature, society will become more elderly-oriented and will feel a sharp increase in demand for public expenditures for health and retirement care.

- Adult day care centers will allow many of tomorrow's senior citizens to live at home or with their children. One expert in sociology theorizes that children who are sent to day care centers as young children will find day care an acceptable alternative for aging parents.

WAYS FAMILIES DEAL WITH FINANCIAL PRESSURES

- Families will depend on two wage earners, not only to increase the amount of present income, but to enable the family to manage financially in the future.

- Young families are finding that their level of living is not as high as they expected, although the combined incomes of two working family members adds up to a sizable income.

- An emphasis on buying for satisfaction has caused Americans to shop and buy as a substitute for happiness.

- Families will have much more consumer information available to them than they have had in the past. As the amount of information available increases, families' abilities to sort and use that information must also increase.

- People will be doing more tasks in the home with computers. Families who use home computers will spend more time in the home. These families may spend more time together and possibly become closer.

- Futurists predict that the pattern of the family as a consuming unit may change to a pattern involving more home production as more and more families strive to deal with inflation.

- Some families are electing voluntary simplicity as a life style. This life style consists of self-determination, ecological awareness, material simplicity, and practical living environments. It is not necessarily a "back to nature" move but rather a new way of looking at all aspects of living.

- Some families are opting for voluntary simplicity by dressing warmer and lowering the thermostat. Others are walking and riding bicycles instead of riding in the family car. Others are carpooling or using public transportation.

12.

THINGS CHANGE

Directions:
Interview an adult to determine ways individuals and families have changed since he/she was a teenager in respect to each of the characteristics in the chart below. Record the changes identified in the spaces provided.

Person Interviewed ______________________________

Age Range (Circle One) :

20–24	46–55
25–34	56–65
36–45	66 or older

Mobility

Population

Family Size

Life Style

Life Span

13.

LOOKING BACK

One futurist analyzes the content of articles from newspapers in making predictions for the future. This activity uses a similar content analysis technique.

Directions:
Use issues of popular magazines to reflect what families were like in any decade–1940's, 1950's, 1960's, 1970's, or 1980's. List below several family characteristics described in popular magazines of the decade selected. (HINT: The last year of a decade often results in articles reflecting events and changes that occurred in that 10-year period.)

Publication/Date	**Family Characteristics for the** ______________ (decade)

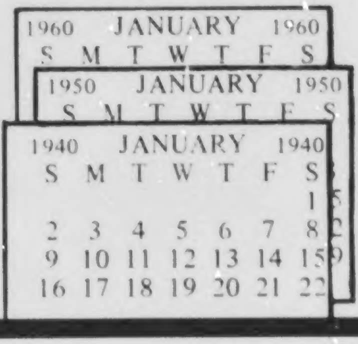
LOOKING BACK (CONT.)

Directions:
Compare your findings from the previous page with those of students who chose different decades. Then attempt to chart the characteristics of families from 1940 to the present. After completing the chart, answer the questions at the bottom of the page.

Decade	Characteristics of Families
1940's	
1950's	
1960's	
1970's	
1980's	
1990's	

How have families changed in the past five decades?

What family characteristics have remained consistent?


1960 JANUARY 1960
S M T W T F S
1950 JANUARY 1950
S M T W T F S
1940 JANUARY 1940
S M T W T F S
1
2 3 4 5 6 7 8
9 10 11 12 13 14 15
16 17 18 19 20 21 22

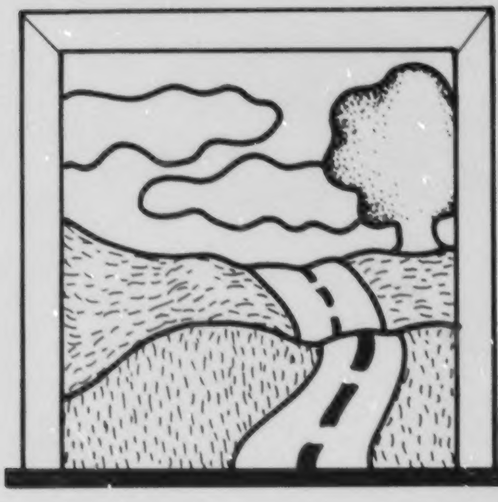
14.

LOOKING AHEAD

Directions:
Think about your future. What will you be doing 15 years from today? Write entries in "your diary" for two days at that time. Try to picture your life style. Include as many details as possible about your future family and what your family life will be like 15 years from now.

Day 1. ______________________________

Day 2. ______________________________



15.

A GIFT LIST FOR THE FUTURE

Directions:

In the left column below list the eight people closest to you. In the center column, list a gift (a product or a trait or characteristic, such as happiness) which you would like to give each person. Don't worry about the cost only think of the *ideal* gift. In the right column, explain why you chose that particular gift for each person.

Person	Gift for Birthday Or "Just Because"	Reason You Chose Gift
1.		
2.		
3.		
4.		
5.		
6.		
7.		
8.		

A GIFT LIST FOR THE FUTURE (CONT.)

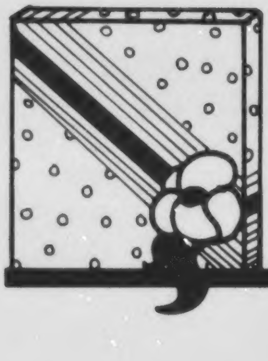
Directions:
Answer the questions below about the gifts you selected on the previous page.

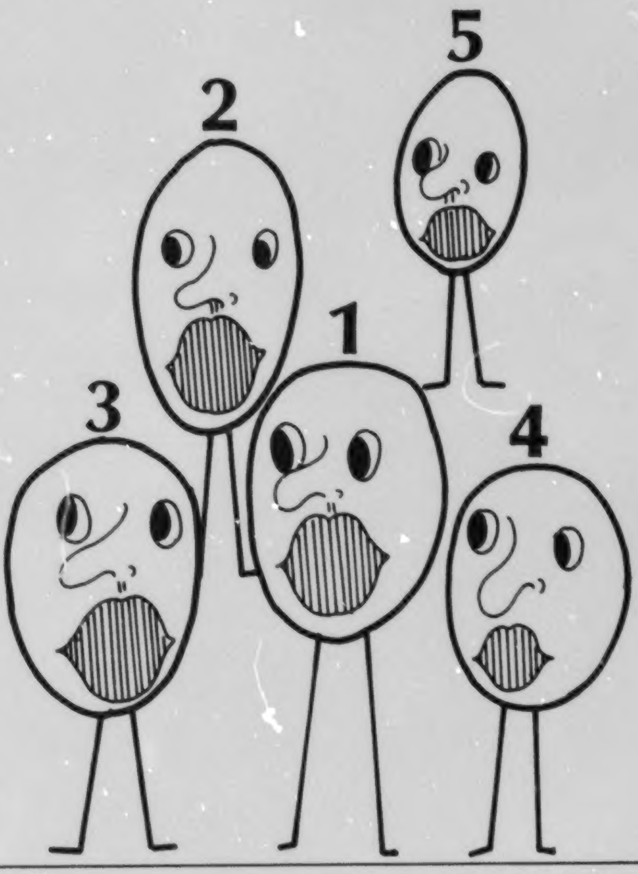
1. Would the gifts you chose last for several years?

2. Would the gifts you chose still be appropriate as the future becomes the present?

3. What types of gifts might help people most in the future?

4. How is cost related to your choices for "ideal" gifts?





Stand Up and Be Counted

- How consumers are dealing with their rights and responsibilities
- Advantages and disadvantages of consuming today
- Problems facing consumers

HOW CONSUMERS ARE DEALING WITH THEIR RIGHTS AND RESPONSIBILITIES

- Consumerism is not new; it is deeply rooted in American history. Futurists predict that consumerism will increase during this decade, although the techniques used by consumers will be different than those used in the past.

- One futurist says, "Consumers are to economics what voters are to politics." The consumer casts a vote each time a purchase is made.

- Four eras of consumerism have been identified in the twentieth century. The first was in the early 1900's when legislation was passed to regulate the safety and sanitation of food and drugs. A second surge of consumer interest occurred during the Great Depression in the 1930's when the concern of people was getting the best buy with very limited spending power. A third consumer era began in 1962 with President John F. Kennedy's Consumer Message to Congress. Consumers in this era concentrated on consumer legislation. Presently, Americans are in a fourth consumer era characterized by limited government involvement and a growth in the amount of consumer information.

- Major consumer concerns over the past 30 years have included the need for:
  - price and quality information,
  - use and care information,
  - protection from hazardous products,
  - price controls,
  - quality controls,
  - enviromental and pollution controls, and
  - allocating scarce resources fairly and finding substitutes.

- Recent magazines aimed at specific groups include several magazines edited specifically for consumers. Included in these magazines are reports of product performance, price information, and general business information related to the consumer.

- It is difficult to predict the consumer movements of the future. Consumers' practices in the past have been influenced by the economy, government regulations, and factors in society. These influences will likely affect consumer movements of the future as well.

- Although consumer legislation has not changed much in the past several decades, the consumer Bill of Rights is still in effect. In 1962, President Kennedy proposed the bill. In 1969, President Richard Nixon added a fifth right to the four proposed by Kennedy. Our basic consumer rights are:
  - the right to be informed (protection from false and misleading information in ads, labels, etc.),
  - the right to safety (protection from goods and services dangerous to health or life),
  - the right to choose (assurance of a variety of goods and services at competitive prices),
  - the right to be heard (assurance that consumers' interests will be heard in legislative and judicial preceedings), and
  - the right to redress (assurance that consumers will be able to seek correction of wrongs against them).

- One futurist notes that consumers may seem less militant than they were several decades ago. Consumers have found that government support comes with burdensome regulations. The real consumer movement today, according to the futurist, is happening in the marketplace.

ADVANTAGES OF CONSUMING TODAY

- Today's consumer has several benefits over the consumer of 100 years ago, or even the consumer of 50 years ago. These benefits include:
  - Legislation has helped ensure the safety, sanitation, and standardization of products.
  - Product recalls have taken items from the marketplace which are potentially dangerous to the health and safety of the consumer.
  - The number of ready-made products available allows the consumer more leisure time.
  - The wide selection offered in the marketplace gives consumers opportunity to make good buying decisions.

- In addition, consumer education is offered through schools, banks, community groups, and businesses. Consumer information is available through the U.S. Government, the Cooperative Extension Service, and literature available in popular magazines such as *Consumer Reports.*

PROBLEMS FACING CONSUMERS

- Among the problems facing consumers is concern with the large amounts of consumer information available, which may or may not be accurate.

- An information gap may exist between those people who produce goods and those people who purchase goods. Oftentimes, the only communication between the producer and the consumer is advertising, which is communication paid for by the producer.

- Another current consumer problem is high aspirations of Americans. For several decades the United States has had a high standard of living. Only in the past few years has the average family had to cut down on spending in order to live within its income.

- The size of shopping centers and supermarkets has created another problem for consumers. In many cases, there are too many items to choose from for the average consumer to make a wise decision. The size of stores may make comparison shopping inconvenient and time-consuming. The average supermarket will have approximately 10,000 items from which the consumer can choose.

- Little personal interaction occurs between sales clerks and consumers. Many consumers use self-service shopping and sometimes utilize a computerized check-out system. With the use of a credit card, the clerk does not even make change for the consumer. The transaction is limited to the few minutes that it takes to process the card and sign the sales slip.

- Another problem for today's consumer is the reality of limited income. The use of buying with credit has encouraged consumers to buy now and pay later. Recently, some consumers are buying now and never paying. Businesses have done the same. Americans are facing the reality that they cannot consume more than they can pay for in a reasonable amount of time.

16.

VIOLATED RIGHTS

Directions:
Consumers' rights are sometimes violated. Read the following situations. Identify the right that was violated according to the Consumer Bill of Rights on page 28. Then explain how the right was violated in each situation.

Situation	Right To:	Explanation of Violation
1. I read an ad for a $30 cassette player, batteries included. The store salesperson said batteries were not included in the price.		
2. I ordered a Christmas present in September. When it hadn't arrived by mid-November, I wrote to the company. I've written several letters to different people in the company. My letters have been ignored.		
3. I bought a bag of cookies that had bugs in it. 4. When I had a new battery put in my car, the mechanic damaged the hood. I talked to lots of people at the garage and people at lots of agencies. Everyone said they could do nothing to help me.		
5. I tried to ride the bus to work to save money. The bus was never on time. I had to start driving my car so I wouldn't be late for work.		

17.

BUT IT WON'T HAPPEN TO ME!

Directions:
Describe three situations in which you, a friend, or a relative felt that your/their consumer rights were violated. Name the consumer right you felt was violated in each situation. What *action* did you or the other person take in each situation? What were the *results*?

Situation 1. ______________________________

____

____

____

____

Situation 2. ______________________________

____

____

____

____

Situation 3. ______________________________

____

____

____

____

18.

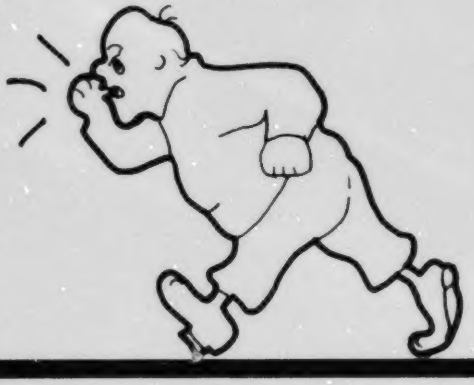
EFFECTIVE COMPLAINTS

Directions:
Pretend you have bought a name-brand pair of jeans from a local store. The jeans were a little too long when you bought them. You knew the length would be fine after washing them because you have bought the brand and size before. Also, the label says the jeans will not shrink more than one percent. However, the jeans shrank about three inches when you washed them. You followed the care instructions exactly. The jeans are now much too short to wear.

You decide to take the jeans back to the store. The store manager tells you that the store is unable to do anything about the jeans. The manager suggests you write to the manufacturer.

Write a letter of complaint to the manufacturer on a separate sheet of paper. Remember, a letter of complaint should include:

- **Date.**
- **Your name, address, and work and home phone numbers.**
- **Name, title, department, organization, and address of the person to whom you are writing.**
- **Subject of your complaint**—the product name and model number or type of service provided.
- **Purchase information**—the date of purchase, the name and address of the place the product was purchased or the service was provided, the price that was paid, and the delivery date. Give the name of the product and serial or model number or describe the type of service. Other relevant information may include the salesperson's name or number. If you enclose a copy of a sales slip, bill, receipt, contract or cancelled check, be sure to mention it in the letter.
- **Reason for the complaint**—defective product, undelivered product, billing error, failure to honor the warranty, the conduct of personnel, etc.
- **History of the complaint**—dates and names of persons you have contacted regarding the problem and what, if anything, was promised or done, references to earlier correspondence (include copies), etc.
- **Expected results**—refund, repair, replacement, adjustment, correction, reimbursement for expenses, compensation for inconvenience, change of policy, or an apology.
- **Reasonable time limit**—when you expect action to occur.



19.

CONSUMER RESPONSIBILITIES

Directions:
Consumers have responsibilities as well as rights. Read each of the following situations. In the spaces provided, write the responsibility the consumers in each situation are not fulfilling. Explain how the persons could fulfill their responsibilities as consumers.

Situation	Consumer Responsibility	Explanation
1. The Dickenson's purchased a toy which their two-year-old daughter could take apart. Some of the parts were very small. One day the daughter put a small piece in her mouth and nearly choked when she swallowed it.		
2. Jeremy bought a five-pound package of ground beef at the grocery store. When he got home, he noticed the meat had an unpleasant odor. He threw the meat away and decided never to shop at that store again.		
3. Maria purchased an infant seat for her eight-month-old son. Instead of drilling a hole through the floor of the car to anchor the seat as instructed, Maria fastened the infant seat around the car seat. The infant was injured when the infant seat became unfastened. Maria decided to sue the company.		
4. Crystal received a shirt for her birthday which was too large. Her mother		

CONSUMER RESPONSIBILITIES (CONT.)

Situations	Consumer Responsibility	Explanation
had the receipt and tags from the shirt. When Crystal tried to return the shirt, the salesperson told her the store didn't have more shirts like the one she had, so they couldn't let her return it. Crystal has the shirt hanging in her closet.		
5. David had wanted a stereo for a long time. When he heard a radio ad for a stereo, he went to the store and bought it. A few days later, David went to another stereo store with a friend. He saw a stereo just like the one he bought for $50 less.		

Directions:
Give examples of two consumer responsibilities you or someone you know has not fulfilled. Explain how the responsibilities could have been fulfilled.

1. ______________________________

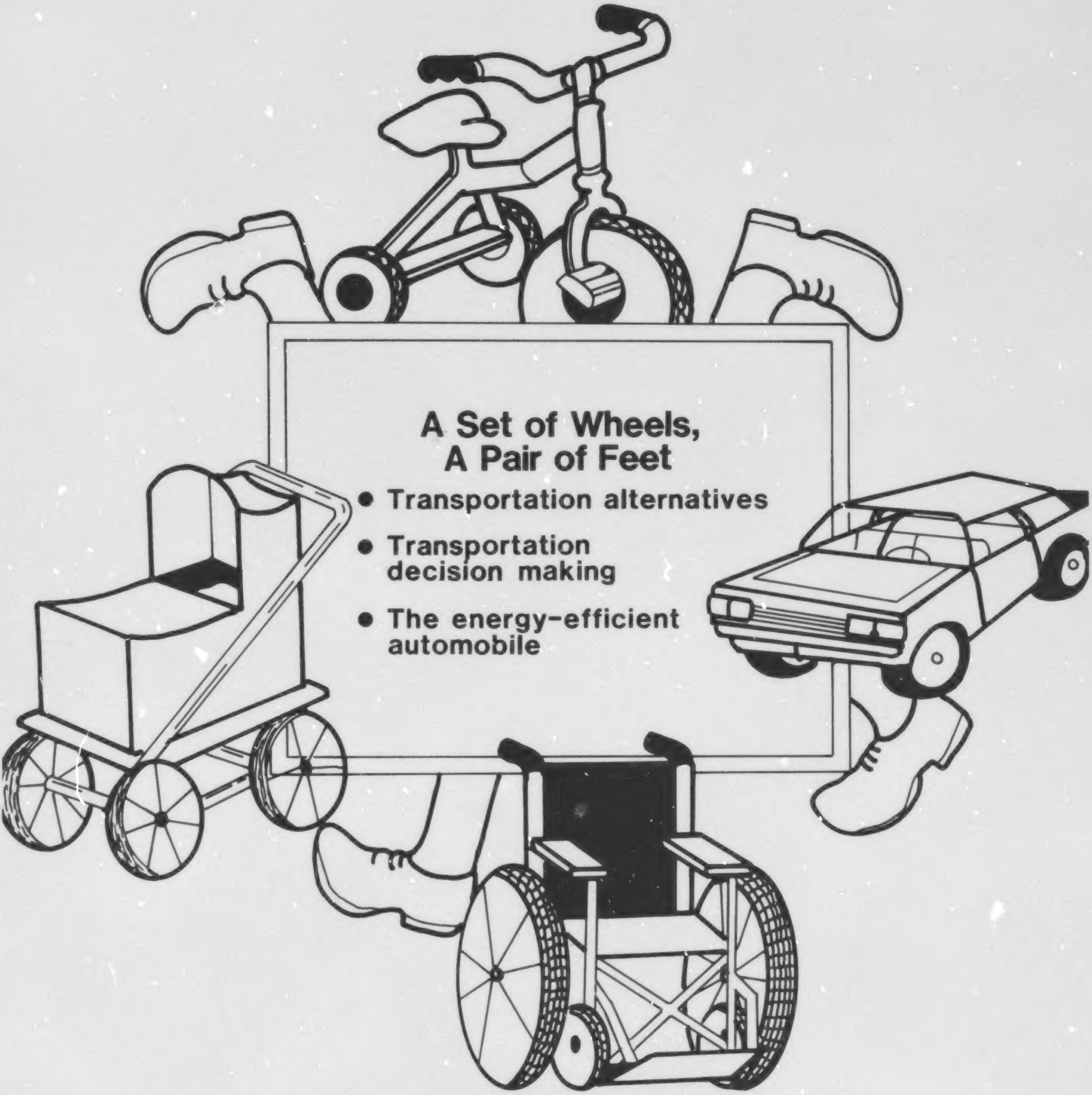
____

____

2. ______________________________

____

____



A Set of Wheels, A Pair of Feet

- Transportation alternatives
- Transportation decision making
- The energy-efficient automobile

TRANSPORTATION ALTERNATIVES

- Throughout the world, people are looking for alternatives to the automobile. Americans are somewhat slower than other countries in finding such alternatives because gas prices here have not risen as drastically as they have in some countries. For example, in the Netherlands over half of all commuting to work is done by bicycle. Five million men, women, and children in the Netherlands depart daily for school, work, and shopping on their bicycles.

- Every day 46 million American workers rely on the automobile for transportation to and from work. Of these, almost 37 million drive alone, consuming millions of gallons of gasoline each week. Since commuting to work is the largest single auto use, it is a good place to start conserving energy as well as saving money.

- Another forecast for the future is that fewer and fewer people will own cars. Instead many people will lease cars, much like people rent apartments. The overall cost might be similar to the purchase price; however, the consumer will not need a down payment and will not have to pay interest.

- The use of public transportation in American cities dropped during the 1970's despite oil shortages in 1974. The high price of gasoline has encouraged Americans to save money getting to their jobs, but generally Americans have not chosen public transportation as an alternative. Mass transportation takes only 3 million workers to work each day.

- Today almost 9.5 million Americans car pool to work each day. Car pooling increased in popularity as a way to save gasoline following the oil embargo in 1974. Efforts were made to match rides with riders. Some communities offered special concessions to car poolers, like use of express bus lanes. But car pooling was not confined to commuting. Car pools were also organized for shopping trips and for taking children to school. Such local trips are among the biggest gas wasters because fuel economy is so low.

- When a car pool is out of the question, many large cities are providing "park and ride" lots where commuters drive to a parking lot on the outskirts of the city and take a bus from there.

- Some employers have started commuter van pool systems using employer owned vans. One employee is responsible for all the driving for one van. The other riders relax and pay a fee based on expenses. Companies save on the money they spend for parking spaces. Employees save on gasoline, oil, maintenance, and insurance, and they might even sell their commuting cars. For every rider in the pool there is one less car on the road.

- The bicycle is the most energy-efficient means of transportation known, more than three times the efficiency of walking. Bicycling, like walking, does not contribute to air pollution, congestion, or urban space restraints. Riding a bicycle in the future will become more accepted. Parking a bicycle will continue to be less expensive than parking a car.

- Another trend in transportation is the popularity of the moped. The typical moped, which is a combination of the motorcycle and the bicycle, weighs about 100 pounds and reaches a top speed of 30 miles per hour. Its advantages are fuel economy and ease of parking, yet it does not require the physical stamina needed in bicycling. About 25 million people own mopeds today, mostly in Japan and Europe. About one million are in use in the United States.

- Over 2 million Americans walk to work and another 1.5 million work at home and require no transportation. Walking not only saves transportation costs but provides good exercise as well.

TRANSPORTATION DECISION MAKING

- A report from the U.S. Federal Highway Administration says that 37 percent of all miles Americans drive their cars are to earn a living. Included are miles driven to and from work and also the miles driven by people who work from their cars. Social and recreational driving accounts for 24 percent of all miles and family business requires 22 percent. The remaining miles are for civic, educational, and religious purposes.

- Car pooling can save $500 a year or more; one may even be able to give up a second car. If one spends $2 a day on gasoline, parking costs another $2, that's $4 a day or $80 a month commuting to and from work. If one shares the bill with another rider, the costs will drop to $40 a month. With three others the cost is $20, and with four other persons the cost is only $16 per month per person. The savings increase as the commuting distance grows and the price of gas increases.

- One trend for the future may be the use of a small efficient car for travel on most daily trips. Large cars may be rented when needed, perhaps when a group wants to travel together or when one needs to pull a trailer.

- One person concerned about transportation in the future asked this question, "Why use a gallon of gasoline to drive your car far enough to buy a gallon of milk?"

- Mopeds and bicycles are a definite possibility for Americans since reports show that 80 percent of all automobile trips are of less than 10 miles.

- Although long-distance driving may decline, the average American will probably travel more than he or she does now combining air travel for long trips with car rentals for local use.

THE ENERGY-EFFICIENT AUTOMOBILE OF THE FUTURE

- Consumers hope that small, energy-efficient cars will be available in the future. Cars of the future, say many people, will be smaller, lighter, and slightly less powerful than today's models. Some say that the car of the future will not be radically different than the car of the present, but it will be more energy efficient. Many of today's cars have the ability to carry five or six passengers and sufficient power to pull a trailer, yet few consumers use either of these capabilities on a regular basis.

- By the end of the 1970's there were 320 million cars in the world with over 40 percent of them in the United States.

- The automobile industry became the world's largest manufacturing industry when crude oil sold for about $2 a barrel. Now that oil prices have climbed past $30 a barrel with no major reduction in sight, the automobile industry is having difficulties.

- The role and design of the automobile in the future will be determined by the price of gasoline which is linked directly to the price of crude oil. Futurists say that oil shortages are forcing the American auto industry to serve consumer demands for an efficient car.

- Still the American automobile is here to stay. Americans and cars seem to go hand in hand. Cities and suburbs were built on the assumption that Americans would have cars. Managers of tourist facilities, shopping centers, drive-in banks, theaters, and fast-food restaurants are all betting that the automobile is here to stay.

- Many of today's cars are capable of operating at a speed of about 80 miles per hour, much faster than the speed limit. If cars were built to attain a maximum speed of 65 miles per hour, still faster than U. S. speed limits, increased efficiency would be realized. This efficiency would partially result from the use of a smaller engine.

- Virtually every new car made in America in the next few years will have electronic engine controls. In fact, electronic magic will make many changes in the ordinary car. The gearshift will go; the mechanical link between the accelerator pedal and the throttle will disappear; even carburetors will be replaced in the next few years with new devices aided by microcomputer chips.

- Other new car developments which will aid motorists include an electronically controlled suspension system which will enable Americans to ride as comfortably in small cars as they presently do in larger ones.

- Electronic entry systems will eliminate the use of car keys. Some cars are presently marketed with these systems.

20.

JUST A DROP OF OIL

Directions:
First read the paragraph below. Next, research energy developments since 1972. Then, based on the paragraph and your research, answer the questions below the paragraph.

In December 1972, the Shah of Iran announced that the price of his country's oil would henceforth be $11.87 per barrel, a rise of 100 percent over the previous price. Other oil-producing countries quickly followed suit. The Shah accompanied his announcement with a blunt warning to industrialized nations that the cheap and abundant energy "party" was over. From now on, the resource on which our whole civilization depends would be scarce and the affluent world would live with the fact.

How did the Shah's announcement affect resource development efforts? ____________________

Has the United States achieved energy self-sufficiency? ____________________

How did the Shah's announcement affect energy conservation efforts in the United States? ____

What effect has this event had on the American family? ____________________

21.

TRANSPORTATION ENERGY

Directions:

To determine the miles per gallon used by each automobile your family drives, keep a record of the miles driven and the gallons of gasoline used by each vehicle. Keep the record for one week or one tank of gasoline. Then determine the miles per gallon using the formula below. (If your family does not own an automobile, work with a family that does to complete this activity.)

FORMULA $\frac{\text{Miles}}{\text{Gallons}}$ **=Miles per Gallon (mpg)**

Vehicle	Miles	÷	Gallons	=	mpg
Automobile 1		÷		=	
Automobile 2		÷		=	
Automobile 3		÷		=	

Directions:

Using a city map or a map of the area in which your family drives the most, record each trip taken by automobile for a week. Do this by using a different colored pencil each day to draw your travel routes on the map. What were the shortest trips taken? the longest? Which trips were repeated several times during the week? Record your answers below.

TRANSPORTATION ENERGY (CONT.)

Directions:
For one week, keep a record of every trip you take by automobile, whether as a passenger or as the driver. Record the information called for on the chart below.

Purpose of Trip	Date	Number of People in Car	Beginning Odometer Reading	Ending Odometer Reading	Number of Miles Traveled	Miles per Gallon of Gas*	Price per Gallon of Gas	Price per Person**

---

* Use the miles per gallon for the appropriate automobile as determined in the activity on page . If you ride in a car other than your family car, ask the owner how many miles per gallon his/her car gets.

** To determine the price per person divide the miles per gallon into the number of miles traveled to find the number of gallons used. Multiply the number of gallons used by the price per gallon of gas to find the total cost of the trip. Divide by the number of people in the car to find the price per person.

TRANSPORTATION ENERGY (CONT.)

Purpose of Trip	Date	Number of People in Car	Beginning Odometer Reading	Ending Odometer Reading	Number of Miles Traveled	Miles per Gallon of Gas*	Price per Gallon of Gas	Price per Person**

* Use the miles per gallon for the appropriate automobile as determined in the activity on page . If you ride in a car other than your family car, ask the owner how many miles per gallon his/her car gets.

** To determine the price per person divide the miles per gallon into the number of miles traveled to find the number of gallons used. Multiply the number of gallons used by the price per gallon of gas to find the total cost of the trip. Divide by the number of people in the car to find the price per person.

TRANSPORTATION ENERGY (CONT.)

Directions:
Look at the chart you filled out on pages 40 and 41. Make an X beside trips that could have been eliminated, a W if you could have walked, a B if you could have used your bicycle, and a P if you could have used public transportation. Then answer the following questions.

1. How could you have reduced the number of trips taken?

2. Which trips could have been combined?

3. Could other transportation arrangements, such as car pooling, have been used for any of the trips? If so, explain.

4. List five ways to reduce the cost of your routine transportation needs.

   A.

   B.

   C.

   D.

   E.

Togs, Rags, and Tags

- How times and clothing have changed
- New textile developments
- Clothing buymanship
- Clothes care conservation
- Dressing to conserve energy

HOW TIMES AND CLOTHING HAVE CHANGED

- At one time, Mrs. Smith purchased yards of blue calico, cut and sewed a dress of the fabric, and cleaned the dress weekly by washing it in boiling water to which she added soap flakes. When the washing was done she placed the dress on the clothesline in the sun to dry. Later with her flat iron, which was heated on the wood stove, she pressed the dress, including the Peter Pan collar and the gathers of the skirt and sleeves. How times have changed!

- Today's consumer of clothing must know about the types of fabrics available for clothing, how garments are made and fitted, and how to care for these garments. Today's consumer will likely use an automatic washer and dryer and professional dry cleaning services. Tomorrow's consumer of clothing will have even more options available for selection and care of clothing.

NEW TEXTILE DEVELOPMENTS

- Manufacturers of apparel will adjust to the new technology available in clothing. A laser machine which cuts one item at a time will be used in clothing manufacturing. This method will be faster and cheaper than methods presently used. The laser machine can be programmed to fill an order for one specialized garment at a very low cost.

- Changes in garment construction will include use of the laser for cutting, stitchless sewing by heat-sealing alone, or stitchless sewing with an adhesive or heat-sensitive web. A new commercial method of fusing fabrics together is called *sonic sewing*. In this method, sound waves generate heat to fuse heat sensitive fabrics along the seamlines as garments are being constructed.

- Space age textiles and technology will continue to be adapted for use on earth. Already textiles developed for the space program are used in protective clothing, including ski jackets. Some of these protective fabrics are coated with aluminum.

- New textile developments will continue to improve existing fabrics and make new ones available to consumers. A few predictions for the future include:
  - a new shrink-resistant finish for cotton fabrics,
  - a new piece-mercerization process for knits,
  - a new soil-release finish for cottons,
  - an economical method of applying design patterns to wool,
  - a method of making wool fully machine washable and machine dryable,
  - a modified nylon or polyester fiber which is more absorbent than those used in fabrics today,
  - new methods for making lightweight simulated leather and suede fabrics,
  - modifications to increase the luster of fibers and yarns,
  - fabrics which stay white,
  - finishes which are both breathable and waterproof,
  - polyesters which are naturally flame retardant,
  - an improved durable-press finish,
  - fabrics which resist static electricity, and
  - an antifungal fiber that prevents athlete's foot.

- The development of a new generic fiber which will have the best qualities of both natural and synthetic fibers—the comfort of cotton, the loft and warmth of wool, the dye brilliance of silk, the performance and ease-of-care of polyester—is likely. The fiber will also be antistatic, lightweight, and retardant to soil and flame.

- In the future, clothes may be cleaned at home in a microwave closet where a high frequency wave of electrical charge will polarize and reject dirt. This process is similar to NASA's decontamination process for spacesuits.

- Custom tailoring at a low cost will be possible with the use of high technology. One futurist suggests that a customer will be able to read measurements into the telephone or computer terminal, and a clothing manufacturer will produce one garment cut exactly to that customer's individual dimensions.

- Wardrobes will be rented on a monthly basis, greatly multiplying one's options. It may be possible to trade in a garment for a recycled one which has been reduced to fiber and remade into a new fabric and then a new garment.

- Trading in an old garment for a new one may be common in the future just as it is today in countries where fibers are in short supply.

CLOTHING BUYMANSHIP

- A survey conducted in 1979 indicated a change in American clothing buying habits. Results of the survey showed that American consumers in 1979 were buying fewer items of clothing than they were a decade earlier. They were also paying more for these goods and tending to buy garments of higher quality. Americans in 1979 were avoiding fads, important in the 1950's and 1960's, and were dressing conservatively. Because of demand, garments were styled to last for years instead of just one season.

- The same survey showed that Americans were buying more from discount stores and outlet stores. The quality of merchandise carried by these stores had greatly improved through the decade. More name brands were carried by discount stores.

- Some industry experts say that home sewing will increase as people begin to sew and mend as a solution to tight budgets. Some home sewers sew because they can have better quality garments without paying more for their clothes. One New York sewing repair center reports an increase of 50 percent in repairs of sewing machines because people are taking old machines, once stored in attics and garages, and putting them to constructive use.

- Others report that home sewing is decreasing because working women, who are increasing in number, do not have enough time for home sewing. One textile manufacturer feels that home sewers may sew particular items, but not whole wardrobes as in the past. Pattern companies are responding with an increase in simple-to-sew patterns.

- Used clothing is growing in popularity. At present, used clothing is purchased from thrift shops, rummage and garage sales, charity sales, and from specialty boutiques which cater to buyers of used and sometimes antique clothing. People who frequently buy this type of clothing say that benefits include better construction, originality of design, and of course, savings.

- Consumers are watching their money when shopping, but also they are watching the time invested in shopping. For some, clothing shopping is recreation, but for people who need a clothing item but have limited time, shopping is a task which should be done as effortlessly as possible.

- Catalog shopping has become increasingly popular; a customer can look at hundreds of pieces of clothing by merely flipping through the catalog pages. At one time, the catalog was mainly popular with rural Americans who found it difficult to shop in person. General stores across America stocked general merchandise and had a catalog available for special purchases. Specialty catalogs as well as general catalogs are still available for the American consumer. Many people choose to catalog shop to save time and energy. They shop either at home or by going to the catalog department of the store.

- Specialty catalogs have greatly increased in popularity since 1980. In 1982, there were 5,000 mail-order catalogs, many of which were clothing catalogs. Today with customers profiles stored in computers, the mail-order business is able to market catalogs only to the consumer who is apt to buy from them. For example, one catalog firm sends catalogs only to men who purchased shoes in the $50 price range. Chances are these customers will buy more than customers who purchase shoes in the $35 price range.

- One major retailer has put a catalog on videodisc to see if this is a wave of the future. This disc, complete with sound and motion, was test marketed in a small geographic area in 1981. The disc is helping cut distribution and printing costs for the catalog. The disc is capable of storing up to 54,000 pictures on a side. Some consumers say it makes the catalog "come alive." The consumer selects the appropriate frames on the videodisc and "freezes" them to view the merchandise and make a selection. These two features, called random-access and freeze frame, will probably become standard features on home videodisc machines, just as a channel selector and volume control are standard on today's television.

- One creative company in the United States offers a unique service to consumers. A customer asks for a specific clothing item, including color, size, and other specifications. In a matter of seconds, the clerk receives a print-out of all the catalogs which offer selections. This company has over 50 catalogs on their random selection file and hopes to expand by putting the system on cable television to open wider markets.

- Instead of shopping for clothes in a retail store, future consumers will have products brought to them via electronic presentation—video, film, halographs—in their homes through two-way cable/microwave hookups.

- Someday, automated custom clothes will be ordered at retail counters. The customer's size will be electronically recorded and stored, and the product will be computer-produced for prompt delivery. Electronic knitting or rapid direct fabric formation may even be used in producing custom fabrics.

- Since garments are lasting the American consumer longer, several new trends in determining fashions have surfaced. One of these is wardrobe engineering. Here a wardrobe consultant works with a client to select the proper plan for long-range purchase of garments. The wardrobe engineer generally looks at the occupation of the client along with the client's other activities.

- Consumers are studying color in relation to their own personal color. At one time, fad colors were affordable, but with garments needing to last longer, tomorrow's consumer will study the colors which are most practical for them personally. Seminars and materials are available for the consumer to learn about personal colors.

CLOTHES CARE CONSERVATION

- Consumers of the future will be increasingly energy conscious. This energy consciousness will affect consumers' decisions in the selection and care of clothing.

- Two big energy users in the home are clothes washers and dryers. Energy can be conserved by controlling the heating of water for the washer and air for the dryer. The following hints can help the consumer save money on the electricity and/or natural gas used to operate clothes washers and dryers:
  - Use warm or cold water as often as possible. If cold water is used, remember that more detergent, softer water, pretreatment of spots, and longer cycles may be required to get clothes as clean as if they were washed in hot water.
  - Some clothing should only be washed in warm or cool water, according to care labels. Cool water helps preserve colors and fabric finishes. Washing in cool water may lengthen the life of a clothing item.
  - Wash full loads of clothing instead of half loads, but do not overload the washing machine. Setting aside a certain day of the week to do laundry will help ensure loads of clothing to wash.
  - Air dry clothes outdoors or indoors whenever possible. Hang some clothes on a clothesline, use hangers for some, and allow others to lie flat on a towel to dry.
  - If you choose to use a dryer, several steps can be taken to reduce the amount of energy used. Takes clothes out of the dryer as soon as possible, either when they are just dry or slightly before they are dry. Leaving clothes in the dryer after it has stopped causes clothes to wrinkle.
  - Proper care of the dryer can help save energy. The seal around the door should fit snugly so that hot air does not escape. If hot air is escaping, the seal needs to be replaced. The lint screen should be cleaned after every use. If the screen is covered with lint, the air flow is decreased and drying time is lengthened.
  - Proper placement and venting of a dryer will help save energy. If the appliances are placed in a kitchen, use the dryer to

help heat the area in the winter. In the summer, dry clothes only when the air conditioning is not being used. If the appliances are placed in a separate utility room, keep the door open in the winter to allow warmed air and humidity to enter the living areas of the home. In the summer, close the door to living areas and perhaps open an exterior door or window in the utility room to allow hot air to escape.

- The heat from your dryer can be used for other purposes. Place yeast breads on top of the dryer to rise. Use the warm top of a dryer to dry a sweater, germinate seeds or bean sprouts, or to warm towels, blankets, or garments for an elderly or ill family member.

DRESSING TO CONSERVE ENERGY

- Some people are saving energy for home heating by cutting down the thermostat and electing to dress warmer in the winter and cooler in the summer. By changing the way they dress, people can be comfortable while conserving energy.

- The insulation value of clothing, referred to as *clo*, affects how comfortable people are in what they wear. How much insulation a garment provides depends on how well it traps air and allows it to hold warm body heat nearer the skin. This is why a quilted fabric, with several layers of fabric and filling, is warmer than one layer of plain fabric. Layering a light sweater over a light shirt is also warmer than a heavy sweater worn alone.

- Another advantage of layering clothing is that layers can easily be removed during periods of activity and then placed back on the body during sedentary moments.

- Generally a clo value of 1.2 to 1.5 is desired in a 65 degree building for winter warmth. For summer comfort in a room air conditioned to 78 degrees, a clo of 0.2 to 0.5 is comfortable. The following charts will help you calculate the clo value of the clothes you wear:

INTRINSIC INSULATION (CLO)[1]
FOR WOMEN'S CLOTHING ITEMS

Bra and Panties:		0.05		
Slip:	Full	0.19	Half	0.13
Dress:	Light	0.20	Heavy	0.63
	Add	10% for long sleeves		
	Deduct	5% for above knee		
	Add	5% for below knee		
Blouse:	Light	0.20	Heavy	0.29
	Deduct	10% for short or no sleeves		
Skirt:	Light	0.10	Heavy	0.22
	Deduct	5% for above knee		
	Add	5% for below knee		
Slacks:	Light	0.26	Heavy	0.44
Jacket:	Light	0.17	Heavy	0.37
Sweater:	Light	0.17	Heavy	0.37
	Deduct	10% for short or no sleeves		
Stockings:	Short	0.01	Panty Hose	0.01
Shoes:	Sandals	0.02	Boots	0.08
	Pumps	0.04		

INTRINSIC INSULATION (CLO)[1] FOR MEN'S CLOTHING ITEMS

Underpants:		0.05		
Undershirt:	Sleeveless	0.06	"T"	0.09
Trousers:	Light	0.26	Heavy	0.32
Shorts:	Short	0.15	Long	0.22
Shirt:	Light		Heavy	
	Short sleeves	0.14	Short Sleeves	0.25
	Long sleeves	0.22	Long sleeves	0.29
	Add	5% for turtle neck		
	Add	5% for tie		
Sweater:	Light	0.20	Heavy	0.37
	Deduct	10% for short or no sleeves		
Vest:	Light	0.15	Heavy	0.29
Jacket:	Light	0.22	Heavy	0.49
Socks:	Ankle	0.04	Knee High	0.10
Shoes:	Sandals	0.02	Boots	0.08
	Oxfords	0.04		

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[1] Miller, Julie Ann. "Wearing the Right Clos." *Science News*, Vol. 117 (June 21, 1980), 396-397.

22.

CARE LABELS-- WHAT DO THEY TELL YOU?

Directions:

Find three different care labels on garments and transfer the information from the labels to the three boxes below. Look up any words or symbols you do not understand. Draw a line from each bit of information you wrote inside the boxes to the matching term outside the boxes.

Dry Cleaning
- Dry-clean only
- Professionally dry-clean only
- Dry-clean; pile fabric method only
- No dry-clean

Hand Washing
- Hand wash
- Hand wash only
- Hand wash separately
- No bleach
- Damp wipe

Machine Washing
- Machine wash
- Home launder only
- No chlorine bleach
- No bleach
- Cold wash, cold rinse
- Warm wash, warm rinse
- Hot wash
- Rinse thoroughly
- No spin
- Delicate or gentle cycle
- Durable or permanent press cycle
- Wash separately

Drying
- Tumble dry
- Tumble dry, remove promptly
- Drip dry
- Line dry
- Do not wring or twist
- Dry flat
- Block to dry

Ironing
- Hang immediately
- Cool iron
- Warm iron
- Hot iron
- Do not iron
- Steam iron
- Iron damp

23.

LABEL, LABEL, TELL ME ALL

Directions:
Compare five hangtags and labels on one type of garment in local stores (For example: sweaters, blouses, coats). On the chart below, record the mandatory and voluntary information included on each garment's labels. *Mandatory information* includes the generic name and percentage of each fiber which makes up more than five percent of the fabric weight, the name of the manufacturer, the name of the country in which the product has been processed or manufactured (if imported), and care instructions. *Voluntary information* may include brand name or trademark names for garment; information about fabric construction, size, or special finish; or a guarantee.

Selected Garment Type ______________________________

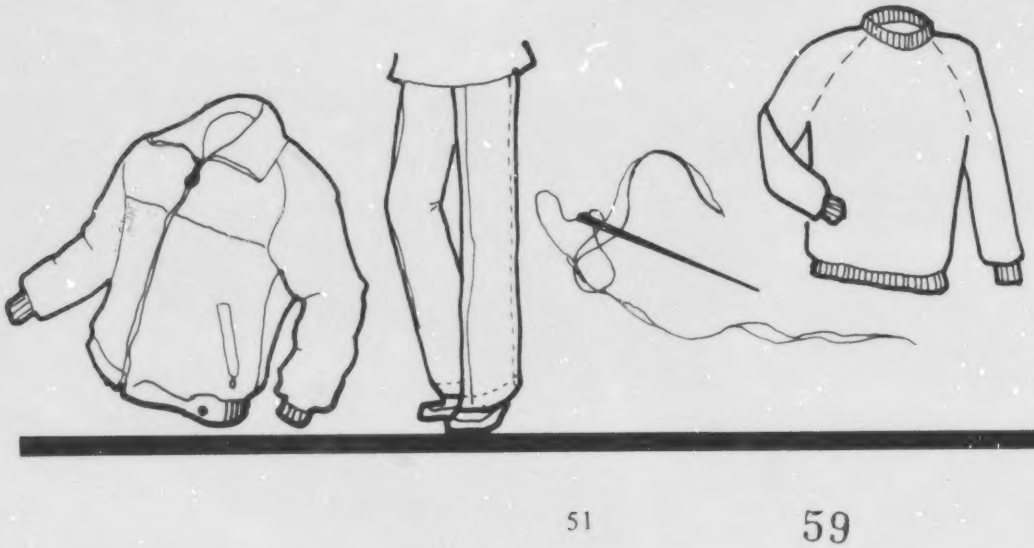
Garment Description	Mandatory Information	Voluntary Information
1.		
2.		
3.		
4.		
5.		

24.

CLOTHES TALK

Directions:
In the chart below, write a description of three items of clothing or accessories you regularly wear. Select from the items listed in the chart or, if desired, add a new category in the empty space provided. Describe the message you want each item to send to others when they see you wearing the item. Finally, note other possible interpretations people might make about the clothing or accessories item.

Item and Description	Message I Want to Send	Other Possible Interpretations
Shoes		
Jacket		
Watch		



25.

DESIGNING CLOTHING FOR THE FUTURE

Directions:
Design a garment suitable for life in the year 2000. Draw a picture of the garment in the space below.

Directions:
Write a catalog description of the garment including design features, fiber content, fabric construction, care, and cost.

Directions:
Answer the questions below to further describe the garment design you proposed.

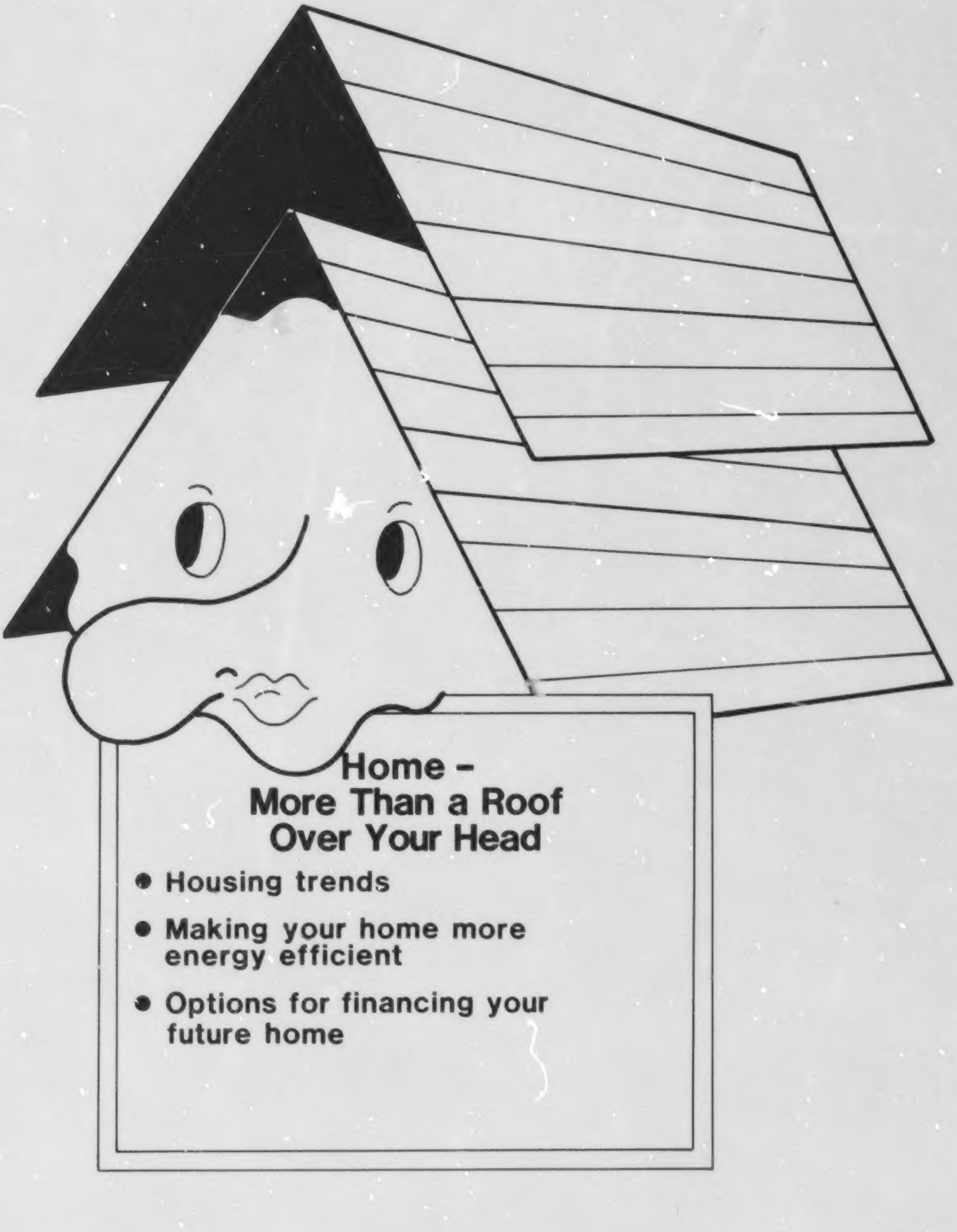
1. What is your garment called? ____________________

2. How is it worn? ____________________

3. Who will wear it? ____________________

4. Will it be a fashion or a fad? ____________________

5. How long will it last? ____________________



Home – More Than a Roof Over Your Head

- Housing trends
- Making your home more energy efficient
- Options for financing your future home

HOUSING TRENDS

- A number of housing trends are evolving as a result of housing shortages, economic conditions, high building and land costs, energy costs, and changing life styles. These trends can be summarized as too many people, too little space, and increasing costs.

- During the 1980's, housing shortages may develop as demand exceeds supply.

- A housing shortage could mean a return to practices common in the past, such as boarding houses, duplexes, mother-in-law suites, and the like.

- The number of dwelling units needing replacement because of demolition, condemnation, or conversion to non-residential uses is expected to increase.

- The conversion of commercial buildings–schools, offices, and warehouses–into rental units and condominiums will provide additional sources of shelter.

- Apartments afloat or underground are possible.

- New housing units are smaller because of more costly labor, land, materials, and fuel and also because of shrinking family size. The average family is now 3.3 persons; by 1995 it may be 2.5.

- Future buyers of single family dwellings are likely to pay more money but get less house than home buyers today.

- Some people looking for less expensive shelter are choosing mobile homes or "manufactured housing" (factory-built housing).

- Home buying by singles will probably increase.

- Builders are concentrating on townhouses, duplexes, multiplexes, and cluster developments which occupy less land and are more fuel efficient than single family dwellings. Townhouses are built in rows with common side walls and front and back exposure. In the duplex, two housing units are separated by a common wall. Multiplexes may be built three or four in a row or four in a square. In cluster zoning, houses are grouped together in clusters, the space between the clusters being left undeveloped.

- A prolonged period of low housing starts could bring the extended family back into being.

- Many young adults–and even married couples–are moving back with mom and dad rather than face the high cost of maintaining homes and apartments.

- A number of elderly people on fixed incomes are abandoning their homes to live with their children or are sharing housing with other elderly people facing the same economic crunch. However, more older people are also expected to continue living in their present homes, a trend that will result in fewer housing resales.

- Some builders are building tandem houses (houses designed for two single adults or families) with such features as two master bedrooms, separate dens, dual pantries in the kitchen, and even two refrigerators to accommodate the "doubling-up" phenomenon.

- The trend is away from rows of houses built side by side and toward cul-de-sacs with small houses built in clusters. This provides a greater sense of neighborhood and feeling of security.

- Neighbors will form self-help organizations and associations in a concentrated effort to restore, upgrade, and maintain a safe environment.

Changing Life Styles–Changing Interiors

- Today's life styles–busy single women, dual career families with children, reconstituted families with some full-time and some part-time children in residence, singles who live together–have created a need for rooms designed for flexibility, such as:
  - ☐ living-bedrooms,
  - ☐ one large living room and larger, sometimes shared, bedrooms or retreats,
  - ☐ furniture that can be arranged in many different ways,
  - ☐ rooms that don't dictate where the furniture must go,

  - less clearly defined living and sleeping sections–rooms that could be either for living or sleeping, and
  - kitchens that would work for several cooks at once.

- A single living area, called a "great room," may replace the separate living room and the family room. The great room opens directly into every other room in the house, saving the cost of building a hallway.

- Large, open "country kitchens" which combine informal kitchen, dining, and living areas will be a second hub of family activity.

- Innovative solutions will be devised for sharing spaces between step-siblings, some of whom may not be full-time residents of a household.

- More creative use of windows, glass doors, skylights, and two-story ceilings will open homes to the outdoors.

- For privacy, people will escape to bedrooms that will be designed as alternate living areas.

- As houses shrink, people will want to treat themselves to more luxurious master bedrooms and bathrooms with huge tubs, saunas, and other luxury touches.

- Home buyers want less cleaning and yard work and more time for leisure.

- Families will have more flexibility in changing floor plans through use of moveable wall partitions and modular furniture.

- Renting furniture is a relatively new concept that is becoming increasingly popular across the country.

- Furniture will have multiple uses, combining storage and seating, for example. Tabletops will slide back into walls when not in use, and the old Murphy bed, which folds into a wall or closet, will be commonplace. Built-in furniture will eliminate unused areas in corners and overhead.

- Demand for at-home office space is increasing. Working couples may want his/her computers and special nooks for video equipment.

- A computer-based entertainment business system, perhaps along one wall in the "great room," could become a central management focus in the home.

- A computer can turn lights on and off, regulate heating and cooling for maximum energy efficiency, and adjust shades.

- A computer can provide a security system, turning on lights and calling the police if it detects strange movements, smoke, or fire.

- A coded, credit-type card–already in use in parking garages and hotels–could replace locks and keys in homes. As technology advances, the sound of your voice could open doors or garages.

- Housing for people of modest means may have fewer and fewer extras. Part of the interior space in new housing units may remain unfinished to be completed by the owner. The type and quality of materials may be lower.

Ways Families are Saving Energy

- Hot water heaters are being serviced yearly for peak efficiency. Consumers are adding insulating jackets to their water heaters.

- Thermostats are being turned down in winter and up in summer.

- Ceiling fans are being installed to circulate warm or cool air.

- Automatic setback thermostats that turn the heat down at night and back up in the morning are being used.

- Storm windows and storm doors are being added to reduce heat loss.

- Insulating shutters and panels for windows are being installed.

- Exterior shading devices like trees, trellises, louvers, awnings, shutters, solar screens, solar films, and roof overhangs to protect the inside of a house from the heat of the sun are being used.

- Supplemental heat sources such as free-standing wood stoves when wood is an inexpensive fuel source are being used.

- Glass fireplace doors are being added to fireplaces to prevent heated air from escaping up the chimney.

- Fluorescent lighting, which uses less energy than incandescent lighting, is being selected. In addition, consumers are making a greater effort to choose the appropriate size bulb for the lighting needed.

Decorating to Feel Cool or Warm

- Warm colors–yellow green, yellow, yellow orange, orange, red orange, red, and red purple–to create a feeling of warmth and cool colors–purple, blue purple, blue, blue green and green–to create a feeling of coolness are being used in decorating to create feelings of temperature preference.

- Homemakers are using furniture slipcovers in light, cool-colored fabrics during the cooling season and in darker, warmer-colored fabrics during the heating season.

- Homemakers are changing accessories such as paintings, flowers, plants, and pillows with the season.

- Draperies, blinds, shades, and cornices which help insulate windows from inside the house are being selected.

- Floor coverings which help insulate and provide visually warm or cool areas of the home are being chosen.

- Area rugs which can be put down or taken up, depending on their color, texture, location, and season are being used.

- Homemakers are arranging furniture to meet seasonal needs.

MAKING YOUR HOME MORE ENERGY EFFICIENT

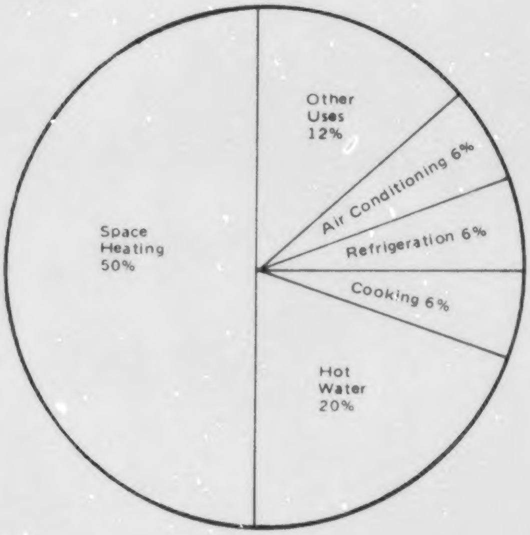
Increasing home energy costs are forcing Americans to take a look at their energy use, evaluate the alternatives, construct more energy efficient housing, and seek ways to save energy in existing housing.

U. S. Energy Use

- The conservation of our natural resources is an important environmental concern.

- With only six percent of the world's population, the United States uses over 30 percent of the world's energy. However, one estimate predicts that half of the U. S. energy consumption can be saved by a comprehensive energy conservation effort. Much of this saving can be accomplished through efforts of individuals.

- Houses consume one-fifth of America's energy. The chart below illustrates energy use in a typical home.



- By 1990 the average household could be spending more than twice what it did in 1980 on energy according to Data Resources, Inc., an economic information service.

Alternative Energy

- The high cost of utilities along with periodic fuel shortages has made alternative forms of energy—including solar, wind, wood, geothermal, biomass, and nuclear—increasingly attractive.

- Two basic types of solar heating systems exist—active and passive. In an active system, a distribution system moves air or fluid between the collector which absorbs energy from the sun and a storage medium, such as water or rocks, which stores the heat. The *passive* solar space heating system uses the structural walls or floors of the house or building to store the solar heat collected through windows or large glass panels.

- Interest in underground or earth sheltered homes is developing. Advantages of earth sheltered dwellings include minimizing temperature differences between outside and inside air, use of less energy, reduction of outside noise, minimal maintenance, privacy, and protection from wind, storms, dust, pollen, and fire.

- Advanced energy technology incorporated in recent Housing and Urban Development showcase projects includes an advanced form of hybrid solar heating, a rock bin to store surplus heat, a roof shaft to let summer heat escape, and an "earth-source" heat pump, (which employs a closed loop) inserted in a well.

Building for Energy Efficiency

- Builders are finding that energy efficiency sells. According to a recent National Association of Home Builders survey, no less than 60 percent of the people surveyed who bought new homes in 1977 and 1978 said energy-saving features were an important factor in the selection; 79 percent said it would be important if they move again. Energy efficiency ranked just below quality of workmanship, the neighborhood, and the builder's reputation among things the respondents deemed most desirable.

- The typical detached house of the future will be smaller, tighter, and more efficient.

- Experts have learned from field studies and other research which current measures will do most to hold down tomorrow's home energy costs. The winners are: insulation, efficient heating, energy-saving appliances, a minimum number of energy efficient windows (except on the south in cold climates), thermally insulated draperies, plugging air leaks, fluorescent lighting, and energy efficient design. The losers, ideas which are ineffective as energy savers, include: fireplaces, vestibules to protect living areas from front-entrance drafts, and closed off kitchen and family areas heated by the sun from windows on the south and by a recirculation fireplace unit.

- Energy features of the future will include passive solar design features, passive solar water heaters (which use the sun to heat water), insulated thermal shutters that close tightly over windows, and earth sheltering of underground or bermed dwellings.

- Site planning can be used to reduce the effects of winter winds and make the most of cool summer breezes. Effective site planning may involve the following:
    - To help reduce the effects of cold winter winds, face garages or less frequently used portions of the house to the north.
    - Provide windbreaks on the north side of the house. Earth berms or banks, evergreen trees, fences, and walls are good windbreaks. Windbreaks slow the wind striking the house by directing it over and around the structure.
    - The side of the house exposed to summer breezes should have windows that open to make the best use of natural breezes in hot months.
    - Face the living areas of the house within 30 degrees of due south to use the sun to provide heat in the winter. South-facing walls and windows absorb heat from the sun. An overhang can provide shade from the higher summer sun. Trees that shed

their leaves in the winter can provide shade in the summer but allow sunlight inside in winter. The moisture evaporating from the leaves also provides a cooling effect during warm months.

- Fuel bills rise when cold outside air, driven by icy winter winds, enters the house through doors, windows, cracks, and holes and pushes out the warmer inside air. Various measures can be taken to reduce heat loss due to movement of air into and out of the house. Some of these measures are:
  - ☐ caulking and weather stripping,
  - ☐ storm doors and windows,
  - ☐ fitting exhaust vents and fans with dampers that can be closed unless needed, and
  - ☐ insulation.

- In warm climates, carefully planned natural ventilation can reduce or eliminate the need for costly air conditioning.

- In summer, windows can be shaded on the outside by trees and vines, overhangs, awnings, or louvers. Indoors, windows can be shaded by roll-down shades, venetian blinds, louvers, or reflective glass.

OPTIONS FOR FINANCING YOUR FUTURE HOME

- By 1982, the average sales of a new home had more than doubled since mid-1975, rising from $42,500 in 1975 to $88,300 in 1981.

- Prices of existing homes have followed the same course, doubling from an average of $40,000 in 1975 to $80,300 in 1981.

- The overall cost of owning and running a home, measured by cost-of-living index data, has also gone up twofold in the same six-year period.

- Housing prices seem destined to continue rising because of upward costs of land, labor, and materials.

- If past trends continue, housing prices will rise faster than the consumer price index.

- Real estate has been a good investment for several years. But if economic conditions change significantly, real estate could lose its glow. Also, tax laws aren't permanent. Homeowners have been getting tax breaks, but Congress is under some pressure to modify the laws.

- A greater variety of mortgages are available than ever before. Four alternative types of mortgages are: adjustable-rate, balloon-note, graduated payment, and shared appreciation.

- A variety of new types of mortgages will make it possible for more persons to qualify for a loan. However, regulators have gradually reduced the safeguards on new mortgages. Consumers will have to protect themselves by comparing the features and penalties of various plans.

- A move toward home owner's warranties for new homes began in the early 70's. Builders may offer the warranty if they agree to enroll all their homes in the program, use Home Owners Warranty (HOW)Corporation's dispute resolution procedure, and comply with HOW's approved building standards. To back up the warranty, builders pay an insurance premium for each house they build.

26.

HOME ENERGY WORD ASSOCIATION

Directions:
Decode each of the following numbers to discover words associated with ways to reduce energy use in the home. The numbers 1 to 26 represent letters of the alphabet from A to Z. Some numbers have been decoded to save *you* energy. After you have decoded the words, briefly explain how each is related to energy conservation.

1.

9	14	19	21	12	1	20	5
___	N	___	___	___	___	___	E

Explanation: ______________________________

____

2.

19	15	12	1	18		8	5	1	20	9	14	7
___	___	___	A	___		___	E	___	___	___	___	G

Explanation: ______________________________

____

3.

20	18	5	5	19
___	___	E	___	___

Explanation: ______________________________

____

4.

3	15	12	15	18		19	3	8	5	13	5	19
___	___	___	___	R		___	C	___	___	___	___	S

Explanation: ______________________________

____

HOME ENERGY WORD ASSOCIATION (CONT.)

5. 20 8 5 18 13 15 19 20 1 20

___ ___ E ___ ___ ___ ___ ___ A ___

Explanation: ______________________________

____

6. 19 20 15 18 13   23 9 14 4 15 23 19

___ T ___ ___ M   ___ ___ ___ ___ ___ ___ S

Explanation: ______________________________

____

7. 8 15 20   23 1 20 5 18

___ ___ T   ___ ___ ___ E ___

8 5 1 20 5 18   10 1 3 11 5 20

___ ___ A ___ ___ ___   ___ ___ C ___ ___ ___

Explanation: ______________________________

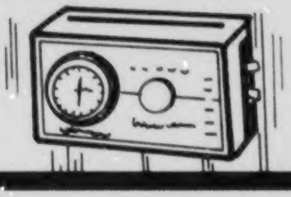
____

8. 3 5 9 12 9 14 7   6 1 14 19

___ E ___ ___ ___ ___ ___   ___ A ___ ___

Explanation: ______________________________

____



HOME ENERGY WORD ASSOCIATION (CONT).

9. 19 8 1 4 5

___ H ___ ___ ___

Explanation: ______________________________

____

10. 6 12 21 15 18 5 19 3 5 14 20

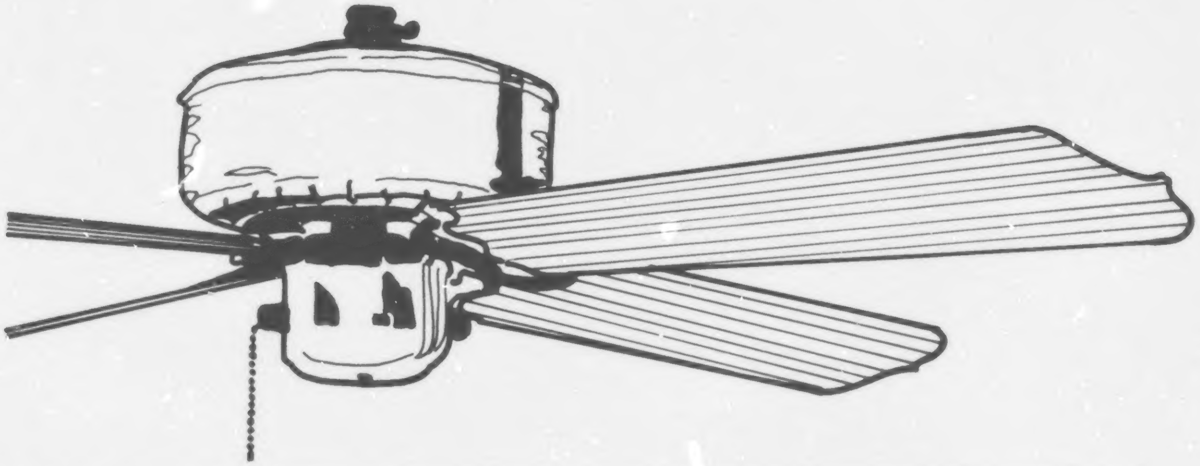
___ ___ ___ ___ R ___ ___ ___ ___ ___ ___

12 9 7 8 20 9 14 7

___ ___ ___ H ___ ___ ___ ___

Explanation: ______________________________

____



27.

CHOOSING AN ENERGY-EFFICIENT APARTMENT

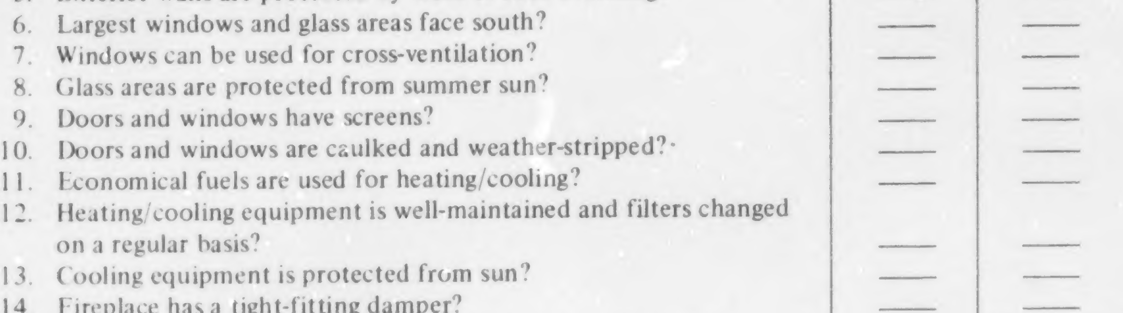
Continuing increases in energy costs and fewer apartments with "all bills paid" cause smart renters to look for energy-efficient units. If you live in an area that requires more energy for air conditioning than for heating, look for an apartment that will require lower costs for cooling. In cooler areas, give consideration to reducing heating costs.

Directions:
Use this check list to evaluate the energy efficiency of an apartment in your community.

Energy-Saving Features[2]	Yes	No
1. Largest exterior wall faces south?	___	___
2. Apartment is between others rather than on the end?	___	___
3. Apartment is located on mid or lower level?	___	___
4. Exterior walls and roof are light in color?	___	___
5. Exterior walls are protected by trees or roof overhang?	___	___
6. Largest windows and glass areas face south?	___	___
7. Windows can be used for cross-ventilation?	___	___
8. Glass areas are protected from summer sun?	___	___
9. Doors and windows have screens?	___	___
10. Doors and windows are caulked and weather-stripped?	___	___
11. Economical fuels are used for heating/cooling?	___	___
12. Heating/cooling equipment is well-maintained and filters changed on a regular basis?	___	___
13. Cooling equipment is protected from sun?	___	___
14. Fireplace has a tight-fitting damper?	___	___
15. Water heater is located close to kitchen and bathroom?	___	___
16. Dishwasher can be stopped to air dry dishes?	___	___
17. Refrigerator can be manually defrosted?	___	___
18. Range and bathroom exhaust systems are vented to the exterior?	___	___
19. Floors are carpeted or rugs can be safely placed on floors?	___	___
20. Windows have roller shades or tight-fitting drapes?	___	___

[1] Glenda N. Moore and Linda J. McCormack, "Energy-Efficient Apartments," College Station, TX: Texas Agricultural Extension Service, 1978.

[2] NOTE: All but the first three items would also apply to evaluating rental housing.



28.

WHO USES THE LEAST ENERGY OF ALL?

Directions:
Ask three persons who occupy about the same amount of living space how much they spent in January and August of last year for the following utilities:

	Person 1	Person 2	Person 3
January			
Electricity	_____	_____	_____
Heating Fuel	_____	_____	_____
Water	_____	_____	_____
Other__________	_____	_____	_____
August			
Electricity	_____	_____	_____
Heating Fuel	_____	_____	_____
Water	_____	_____	_____
Other__________	_____	_____	_____

Directions:
Try to identify factors which might account for the differences in utility costs. Obtain the following information for each person interviewed above. Write "yes" or "no" in the blanks when appropriate.

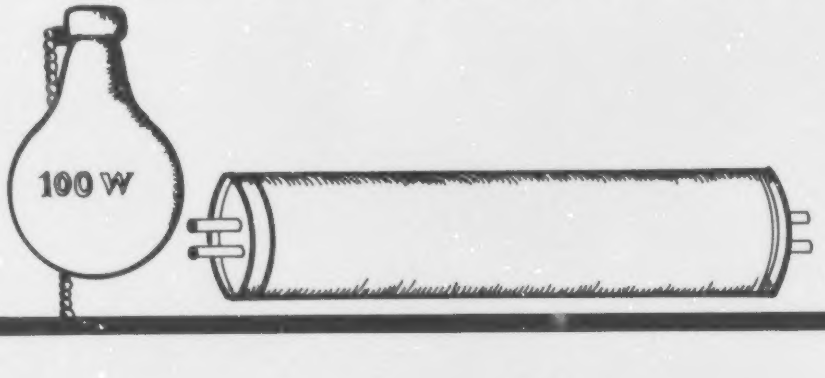
Number of persons in family?	_____	_____	_____
Trees and shrubs placed to block wind in cold weather, allow sun in winter, but shade house in summer?	_____	_____	_____
Adequate caulking and weather-stripping?	_____	_____	_____
Adequate insulation for climate in attic, outside walls, and crawl spaces?	_____	_____	_____
Attic crawl space ventilated?	_____	_____	_____
Storm doors and windows?	_____	_____	_____
Double glazed windows?	_____	_____	_____
Few windows on north, west, and east?	_____	_____	_____
Heat producing greenhouse on south side of house?	_____	_____	_____
Carpet?	_____	_____	_____
Insulating window treatments?	_____	_____	_____
Fireplace with automatic flue damper or glass doors?	_____	_____	_____
Wood burning stove?	_____	_____	_____
Energy efficient appliances?	_____	_____	_____
Humidifier for winter use?	_____	_____	_____
Solar heating and/or cooling?	_____	_____	_____

WHO USES THE LEAST ENERGY OF ALL? (CONT.)

	Person 1	Person 2	Person 3
Automatic setback thermostat?	____	____	____
Wind generator?	____	____	____
Heating/cooling units turned off whenever possible?	____	____	____
Windows for cross-ventilation opened whenever possible instead of using air conditioner during summer?	____	____	____
Unused rooms shut off when not needed?	____	____	____
Thermostat set no higher than 68° in winter, no lower than 78° in summer?	____	____	____
Ceiling fans used and thermostat raised to 82° in summer?	____	____	____
Thermostat turned down to 55° at night in winter and electric blanket or extra cover used?	____	____	____
Hot water heater set at 140° with dishwasher, 120° without?	____	____	____
Hot water heater covered with an insulating jacket?	____	____	____
Hot water use reduced by washing clothes on cold or warm setting, taking short showers instead of baths, and not running hot water while shaving or brushing teeth?	____	____	____
Smaller appliances used for small jobs instead of using larger appliances?	____	____	____
Fluorescent lighting or the lowest wattage bulb for purpose used?	____	____	____
Lights and TV turned off when not in use?	____	____	____
Food freezer kept full?	____	____	____
Window treatments adjusted as needed for energy efficiency?	____	____	____

Directions:

Compare your findings with those of classmates. Put a plus by the 10 most frequently observed energy-saving practices. Put a minus by the 10 least frequently observed energy-saving practices.



29.

WATER, WATER EVERYWHERE

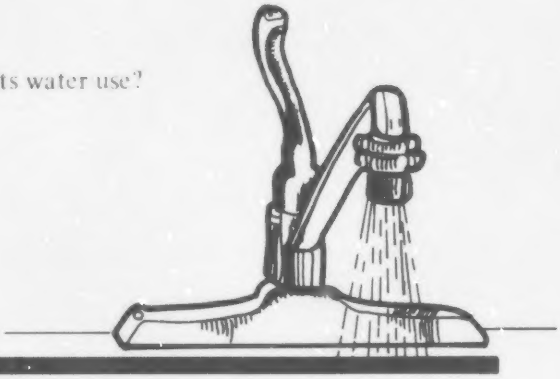
Directions:
Estimate the amount of water your family uses each day. Use the averages in the second column for making your estimates:

Activity	Average Water Used per Single Activity	X	No. Times per day per Activity	=	Total Water Used per Activity per Day
Clothes washing (by machine)	20 gallons	X		=	
Using dishwasher	15 gallons	X		=	
Dishwashing (by hand)	5 gallons	X		=	
Bath	15 gallons	X		=	
Shower, short	10 gallons	X		=	
Shower, long	20 gallons	X		=	
Washing face and hands	2 gallons	X		=	
Flushing toilet	9 gallons	X		=	

How much does water cost in your community?

How much money does your family spend on water each day? (Divide your family's monthly water bill by the number of days in the month.)

What are some steps your family could take to reduce its water use?



30.

SNUG AS A BUG

Directions:
Choose one room in your home and complete the following information about its energy efficiency and decor.

Kind of room (kitchen, bedroom, etc.) ________________

Orientation of room (north, south, east, west) ________________

WINDOW TREATMENTS
Numer of windows ________________

Orientation	Description of window treatment	Is it energy conserving?	How could its energy efficiency be improved?
Window 1			
Window 2			
Window 3			
Window 4			

FLOOR COVERINGS
What kind of floor covering is used? (carpeting, wood, area rug, vinyl, etc.)

____

If the room is carpeted, describe the carpet construction. ________________

____

What type of fiber is used? ________________

Is there a pad under the carpet? ________________

What could you do to increase the energy efficiency of the floor coverings in the room? ________________

____

SNUG AS A BUG (CONT.)

FURNITURE Kind of Furniture	Size	Shape	Color	Upholstery fabric	Other

DESIGN ELEMENTS–COLOR AND TEXTURE

Are the colors used in the room warm or cool? ______

Would the colors used be more appropriate for winter or summer? ______

What changes could be made to make the room seem

warmer? ______

cooler? ______

LIGHTING

Number of light fixtures ______

	Incandescent or fluorescent?	Ceiling mounted, ceiling recessed, wall mounted, or portable?	Purpose: general, task, and/or aesthetic?	Description of lamp and luminaire?
Fixture 1				
Fixture 2				
Fixture 3				

Does the lighting design provide adequate lighting for the activities performed there? ______

______

What changes, additions, or deletions would you recommend for the lighting? ______

______

31.

SUN, WIND, AND SHADE

Directions:
Check your home's surroundings and weather tightness using the check lists below. Identify ways your home could be made more energy efficient.

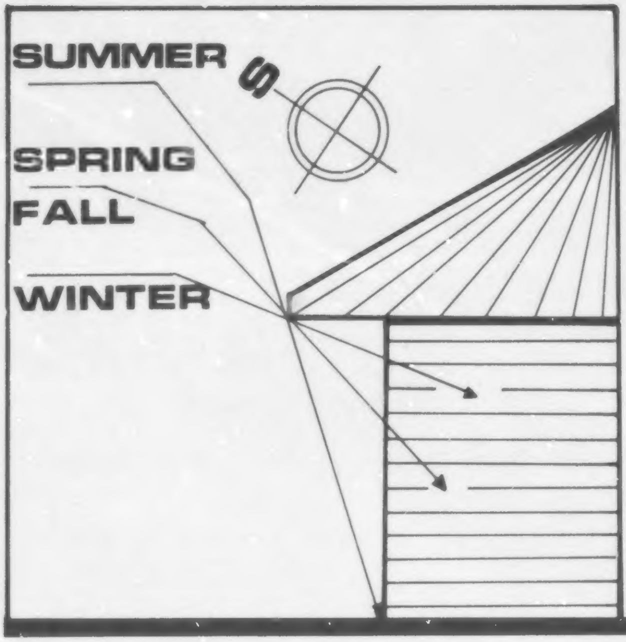
	SURROUNDINGS	
Least Energy Efficient	**Most Energy Efficient**	**Ways to Improve Your Home**
Completely exposed to wind and sun	Completely sheltered on at least three sides by high banks or walls	
Completely isolated from other houses and buildings	Only one outside wall as in an apartment	
No trees	Deciduous trees to shade from summer sun; evergreens to form windbreak	
Color and materials used in home inappropriate for climate	Color and materials in home appropriate for climate	

	WEATHER TIGHTNESS	
Least Energy Efficient	**Most Energy Efficient**	**Ways to Improve Your Home**
No weather-stripping	Weather-stripping of all windows and doors	
No insulation of outside walls	Sufficient insulation of all outside walls for climate	
Ceilings not insulated or with insufficient insulation	Well insulated ceilings	
Missing or chipped caulking around windows; none around doors or in cracks	Caulked windows, doors, and cracks	
Single-pane windows; no storm windows or doors	Storm windows and doors for all windows and doors	
Large windows and doors, especially on north, east, and west	Fairly small windows and doors, few in number	

SUN, WIND, AND SHADE (CONT.)

Least Energy Efficient	WEATHER TIGHTNESS Most Energy Efficient	Ways to Improve Your Home
Cracked, loose, or split siding	Siding in good condition	
No flashing or flashing in poor condition	Flashing in good condition	

[1] Adapted from: Kleeberg, Irene Cumming. *The Home Energy Saver*. New York: Butterick Publishing, 1977, pp. 30-31.



TREES OR OVERHANG ON SOUTH AND WEST SIDES TAKE ADVANTAGE OF THE SUN

32.

HOME, SWEET HOME-- HOW MUCH WILL IT COST?

Directions:
Obtain the following information about housing in your area. Contact a local realtor, lender, and/or check your local newspaper for information.

1. What is the average monthly income of families in your community? ____________________

2. What is the average purchase price of median-priced housing in your community?

Housing Type	New	Previously Occupied
House	$________________	$________________
Townhouse	$________________	$________________
Duplex	$________________	$________________
Mobile Home	$________________	$________________

3. Choose one of the above types of median-priced housing. What type financing arrangements are available in your community for that type of housing in the current housing market?

Type Financing	Purchase Price	Down Payment	Initial Cost	Mortgage Rate	Mortgage Length	Monthly Payments	Total Cost Over Life of Mortgage

4. For the first year after purchasing the median-priced housing in Item 3 at the most readily available financing, what housing expenses could the family expect?

Item	Monthly Expense	Year Total	Percent of Total Expense
Principal	$	$	%
Interest	$	$	%
Taxes	$	$	%
Insurance	$	$	%
Utilities	$	$	%
Repairs, Maintenance	$	$	%
TOTAL	$	$	100%

HOME, SWEET HOME--
HOW MUCH WILL IT COST? (CONT.)

5. How much money would an average-income family buying the median-priced housing in Item 3 save on income taxes each year because of the purchase? ______________

6. What percentage of the monthly income would the average-income family in your community have to spend to purchase the median-priced housing in Item 3? (monthly housing expenses ÷ monthly income = percent of income spent on housing)

7. What would be the average monthly cost of renting 1200 square feet of space in your community if you rented a (n)

new house? $________

older house? $________

duplex? $ ________

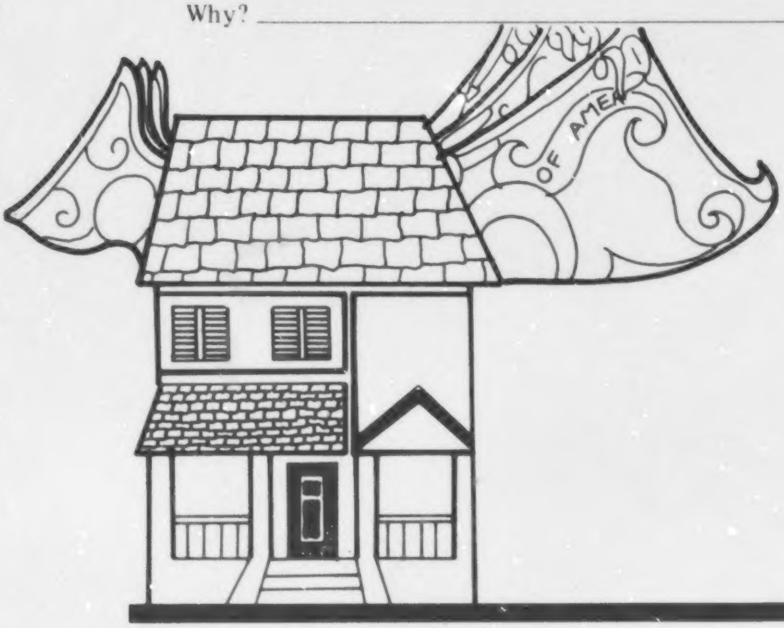
apartment? $________

mobile home? $________

8. Which housing choice do you feel is best for the average family in your community?

Housing Type? __________ Buying? __________ Renting? __________

Why? ____



33.

BE MORTGAGE-WISE

Directions:

Determine the amount of loan needed (after down payment) to purchase a median-priced house in your community. Note the loan amount in the space provided above the chart. Obtain information on three different types of mortgages available in your community. Fill in the chart below to compare the total cost of paying off the loan under each type of mortgage. (Lending institutions are required to provide this information to borrowers.) NOTE: A microcomputer could be used to generate these figures.

Amount of loan: $ ________________

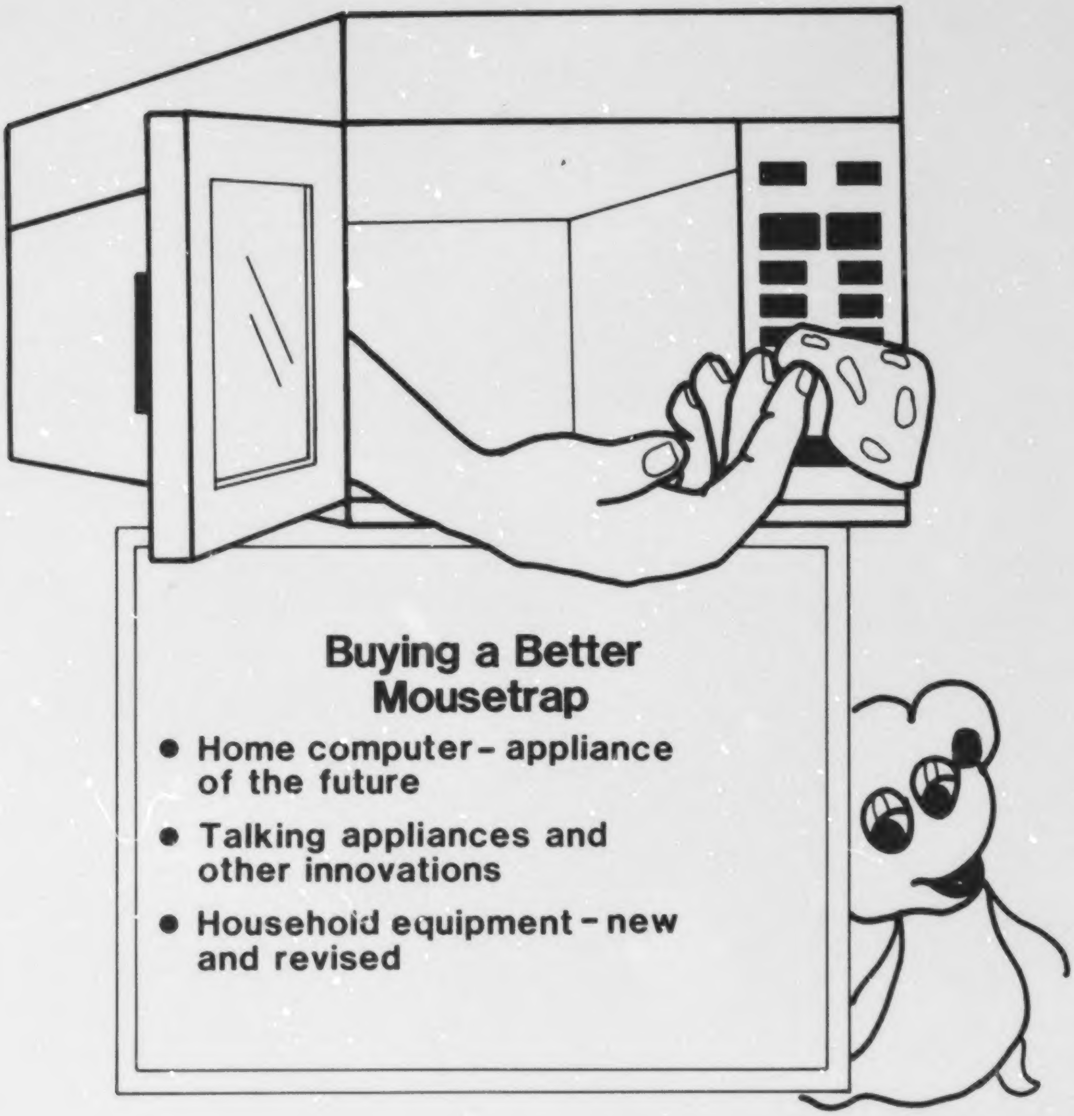
	MORTGAGE TYPE 1		MORTGAGE TYPE 2		MORTGAGE TYPE 3	
Year	Monthly Payment	Year's Total	Monthly Payment	Year's Total	Monthly Payment	Year's Total
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						
13						

BE MORTGAGE-WISE (CONT.)

	MORTGAGE TYPE 1		MORTGAGE TYPE 2		MORTGAGE TYPE 3	
Year	Monthly Payment	Year's Total	Monthly Payment	Year's Total	Monthly Payment	Year's Total
14						
15						
16						
17						
18						
19						
20						
21						
22						
23						
24						
25						
26						
27						
28						
29						
30						
TOTAL PAID						

Mortgage Features

Qualifications for Mortgage



Buying a Better Mousetrap

- Home computer - appliance of the future
- Talking appliances and other innovations
- Household equipment - new and revised

HOME COMPUTER– APPLIANCE OF THE FUTURE

- The electronic home–hooked up by microcomputer to a cable system and telephone–will change the way people live, work, plan, and buy.

- Computers designed for the home already are in use in over half a million U. S. homes and that number is growing.

- Many owners of personal or home computers purchased them because of specific interest in computers and programming. Others have computers at home so they can continue work-related applications. Most families, however, purchase a microcomputer because it will provide services they want and need.

- During the remaining years of the twentieth century the home computer undoubtedly will become a common household fixture. Because of the complexity of this electronic appliance and other electronic appliances used in homes, the consumer information system will undoubtedly change.

- Entertainment and educational opportunities are a primary attraction of microcomputers, especially in homes with young children. The home computers can be a substitute for more costly away-from-home entertainment. Programs to study art or music or to learn a foreign language can be purchased.

- Families also purchase home computers to manage home records and financial accounts. Budgets can be prepared and then used rather than be stored in a paper file. The microcomputer can help families balance bank accounts and manage investments. Payments can be categorized electronically and filed for use in preparing income tax returns.

- A home inventory can be stored in computer data files that identify each household item, its date of purchase, cost, and location. Such records would simplify many insurance claims.

- The computer can store other records such as important family dates (birthdays), appointments, due dates for bills, and the dates when securities such as certificates of deposit or bonds mature.

- Home computers in the future will enable families to monitor investment opportunities on a daily basis by subscribing to a data network supplying information on stock and bond markets, individual retirement accounts, or money market certificates.

- Programs permitting individual analysis of health and dietary needs currently are available. Nutrition and physical exercise programs can be planned and monitored and menus can be prepared for specific dietary requirements. The recipes stored in electronic files can be cross referenced, quickly retrieved, and adjusted to accommodate different size groups. Shopping trips can be planned by comparing the current food inventory with menu plans for the week.

- The newly emerging fields of voice recognition and voice synthesis will allow the computer to respond to spoken commands in addition to typed commands. Also, the voice synthesis features may be used to enhance language learning and improve communication skills.

- Many homes are equipped with computers unknown to their owners. Appliances such as microwave ovens, dishwashers, and washing machines may be controlled by microcomputers. Hand held calculators are commonly used at home, and when such calculators are programmable, it is difficult to argue that they are not computers.

- A computerized thermostat is available to control the temperature settings of heating and cooling systems. The thermostat can be programmed to maintain different temperatures for different times of the day or night.

- Another computerized device may assist with maintaining home security. With this, the computer monitors sensors which are installed in the house to warn the family of fire or break-ins.

- The electronic, paperless newspaper will become a reality along with electronic yellow pages. News or advertising can be called up on a videoscreen and read whenever one wishes. A subscriber could select headlines, foreign news, consumer news, features about people, weather, advertisements, etc. An electronic "newspaper" may have hundreds of pages of information in its memory.

- Assigning routine tasks to computers and eventually to robots indicates a shift to less time spent on tedious household chores. It is probable that the microcomputer will affect the interaction of family members, similar to the way television has.

- The computer will make possible a return to cottage or home-based industry on a new electronic basis. This will bring a new emphasis to the home as the center of society.

- Some people will commute to work via the computer. So far telecommuting, as it is called, is limited to jobs that can be performed efficiently without co-workers–for example, typists, brokers, computer programmers, and statisticians. Telecommuting will save expenses for lunches, commuting, and parking and will allow a tax write-off for using one's home as an office.

- Telecommuting will enable two wage earners to live together yet hold jobs that are geographically separated.

- Networking or linking computers together will allow individuals to be both users and suppliers of information transmitted by the network. Hundreds of computer networks are springing up all over the United States.

- Teleshopping will be possible. To order goods they see advertised, consumers can type messages into their computer terminals, tell where they want the goods delivered, and give the necessary credit card information.

TALKING APPLIANCES AND OTHER INNOVATIONS

- Don't be surprised by talking appliances! In the future, appliances may use voice output for cooking instructions and diagnostics. Eventually, you may be able to control appliances by talking to them instead of pushing buttons or touching controls.

- A computer in the kitchen may be used to read Universal Product Codes, automatically set the microwave oven to cook the food, and then put the name of the food item on the grocery list. (Universal Product Codes are rectangular blocks of parallel lines with accompanying numbers which can be read by electronic optical scanners.)

- Electronics will become a part of every major appliance, bringing appearance changes, new features, and new functions. Electronics will enable the appliance to provide feedback about temperature, maintenance, and repairs. It will automatically control such operations as automatic cooking and defrosting.

- Combined appliances are a possibility for the future. A single apartment dweller may be able to purchase a wall refrigerator/freezer/microwave/shelf unit. Tomorrow's family may want a TV/telephone/computer unit.

- Refrigerators of the future may have more specialized compartments and doors and even compartments which can be converted from refrigerator space to freezer space with a flip of a switch.

- Improved insulation will likely reduce energy usage of tomorrow's refrigerators and freezers.

- Heat produced by the refrigerator/freezer may be used to heat water for the sink and dishwasher.

- Thermal browning units will significantly increase the types of foods that can be cooked well in microwave ovens. The microwaving part of the process will use less energy than is required for conventional cooking.

- A fairly new category of home equipment is the counter-top convection oven. Experts are predicting that we will be hearing more and more about convection cooking over the next few years. Convection ovens are more efficient users of electrical energy than conventional ovens because they use a fan to continuously move air around the food.

Convection cooking saves both time and energy.

- Induction cooking, a new method of range-top cooking currently in its infancy, [illegible] likely to increase in popularity as the [illegible] comes down. In induction cooking, [illegible] is applied to a powerful electro-magnetic coil. The energy in the coil is transferred by induction directly to the pan where it excites the molecules in the pan causing the pan to heat. Thus, food in the pan is cooked by the heat from the pan itself, and there is no heat lost in heating a resistance coil or glass-ceramic range-top which must then heat the utensil. The advantages of induction cooking include instant full heat, instant cool down of the cooking surface, more and better control over the cooking process, and a smooth easy-to-clean glass-ceramic cooking surface which remains relatively cool.

- An increasing number of consumers are calling toll-free numbers to find out how to repair their home appliances themselves. Computer discs and videotapes may also aid consumers in making their own repairs in the future.

- Video recorders or videodisc players will open up a whole new world of education, entertainment, and information services. Increasingly people will have large libraries of motion pictures, television shows, books, educational courses, and other materials in these new video formats.

- Most homes in the United States could have a teletext decoder installed on the home TV set(s) within five to ten years, perhaps sooner. A teletext decoder is the device used to cause one-way broadcasts of information to appear as "print" on home TV screens. Advertisers will find it cheaper to reach their desired audience in print using teletext because there will be no paper, printing, or handling costs.

- By pushing a few buttons, any viewer will be able to call up advertising for any product. Ads will be cross-indexed in several ways so that the viewer can find quickly the very best buy in any category–pies, pans, pianos, or prerecorded plays.

- Advertisements will reach potential customers at the precise moment the customers want information to satisfy an interest. In effect, this is advertising on demand–displayed only when the potential customer is already in a receptive mood.

- The cost of delivering this advertising will be extremely low. The TV station can send up to 25 pages of teletext print for display on a viewer's home screen in one-tenth of a second. Compare this with the six to eight minutes of broadcast time required to deliver a comparable advertising message on commercial TV as we know it today.

HOUSEHOLD EQUIPMENT–NEW AND REVISED

- Integrated home systems including security, comfort control, energy management, and convenience features are likely in the future.

- Use of robots in the home will increase productivity and reduce drudgery.

- Solar hot water will supply 50 percent or more of household needs in many homes. Once installed, a solar hot water system provides nonpolluting energy that is exempt from ever-rising fuel prices.

- The ceiling fan is not a new appliance, but rather a revised appliance which has regained popularity with the rising costs of energy used in air conditioning. A ceiling fan, which uses about as much electricity as a 10 to 150 watt light bulb, can allow the thermostat to be lowered as much as 8° F because moving air feels cooler.

- A ceiling fan costs less than one cent per hour to operate while a central air conditioning unit or room air conditioning unit may cost between 10 and 12 cents per hour to operate.

- Room air conditioners will become more efficient and even be able to regulate their own energy consumption.

- Room air conditioners and heat pumps will be designed to increase their energy efficiency.

- The heat pump, a single unit used for heating and cooling, is receiving attention as a change from traditional central heating and air conditioning units. Heat pumps work year round. In the winter, they take the heat from the outside air and bring it inside. In the summer, they remove unwanted heat from the inside air and move it outside. Heat pumps are even being developed that will heat water for up to 50 percent less than the cost of heating water in a conventional water heater.

- In some areas of the United States consumers are demanding heat pumps. These areas have moderately cold winters and depend primarily on fuel oil or propane for heating fuel. Heat pumps, which are fueled by electricity, make heating and cooling less expensive in these areas. Other consumers who have access to natural gas and want air conditioning are finding that heat pumps are best used in combination with a gas furnace or an electric air conditioning system. Heat pumps generally require less maintenance than other heating and cooling units.

- Considerations in purchasing a heat pump include climate, price, availability of fuels, price of electricity, initial cost of the system, personal preference, and maintenance costs.

34. ARE YOU A COMPUTER WHIZ?

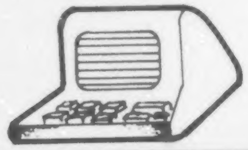
Calling it a whatchamacallit or a thingamabob won't do. There are too many of them, and they're all around us and closing fast. You can't read the newspaper through or spend an evening in front of the TV, let alone get through a day in school, without knowing words associated with computer use. Computer terms like "input" and "output" are spilling over into everyday language. Knowing the words makes it easier to read and talk about computers.

Directions:
Study the brief list of common computer terms. Then complete the crossword puzzle about computer terms that follows this word list.

Access	The act of obtaining data stored in the computer.
BASIC	(Beginner's All-purpose Symbolic Instruction Code) A programming language frequently used with microcomputers.
Binary	Two possible signals such as "O" or "1", that correspond to the "on" and "off" states of computer circuitry.
Bit	The smallest unit (letter, number or symbol) of information stored in a computer; a binary digit.
Byte	A group of eight bits.
Chip	A fingernail-size semiconductor typically made of silicon, that can hold thousands of bits of information.
Computer	A device that can store information, manipulate data and solve problems.
CPU	(Central Processing Unit) The section of the computer that controls its overall operation. The CPU carries out, or processes, instructions given to the computer.
CRT	(Cathode Ray Tube) A video screen used to display data and graphics.
Debug	To locate, remove and correct mistakes in a computer program.
Diskette	A thin, flexible record-like plate, coated with magnetic material and used to store computer information; a floppy disk. Also disc or disk, or magnetic disk.
File	A block of information that when combined with others, makes up a group of related data on a disk; similar to files used in office work.
Hard copy	A printout on paper.

ARE YOU A COMPUTER WHIZ? (CONT.)

Hardware	The physical equipment, mechanical or electronic, that makes up the computer system (the keyboard, display screen, casing, etc.)
Input	To transfer data from a input device (such as a keyboard, cassette, or disk) to the computer's memory.
I/O	(Input/Output) The passage of information into or out of the computer.
K	1,024 bytes of information that can be stored in the computer system. A computer that has 16K of memory has a capacity of 16 times 1,024 bytes of memory.
Memory	Elements in the computer that retain instructions or data used by the central processing unit (CPU).
Menu	A selection of possible transactions offered by a computer.
Microcomputer	A type of computer that is smaller than both the minicomputer and the mainframe computer.
Microprocessor	A central processing unit on a chip, or a computer system designed around such a device.
Network	A system of interconnected computer systems which use terminals for communications between terminals.
Output	Data transferred from the computer memory to a storage or output device (such as a printer).
Peripheral	An external or remote device in a computer system. Input/output devices, such as keyboards, printers, magnetic tapes and magnetic disks, are peripherals.
Program	A set of instructions, arranged in sequential order, telling the computer to do a specific task or to solve a problem.
Programming Language	A special language used to give instructions to a computer (e.g., BASIC, COBOL, PASCAL, FORTRAN).
Software	The programmed instructions that tell a computer what to do.



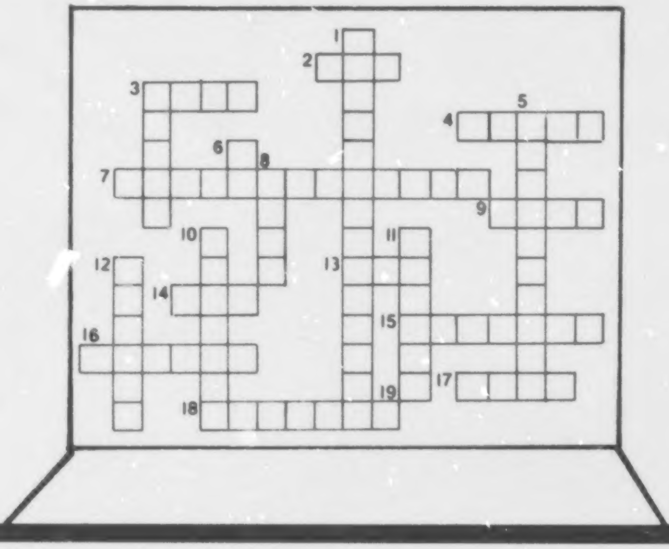
ARE YOU A COMPUTER WHIZ? (CONT.)

ACROSS

2 The smallest unit of information stored in a computer
3 A group of eight bits
4 To transfer data from a device such as a terminal or card reader to the computer's memory
7 The smallest, simplest type of computer
9 A thin, flexible record-like plate coated with magnetic material and used to store information
13 The section of the computer that controls its overall operations; it carries out, or processes, instructions given to the computer (abbr.)
14 A videoscreen used to display data and graphics (abbr.)
15 A sequence of instructions that direct the computer to do a specific task or to solve a problem
16 Elements in the computer that retain instructions or data
17 A group of related data stored on a disk; serves same function as cabinets used in offices
18 A system of interconnected computer systems which use terminals for communications

DOWN

1 A tiny component capable of performing simple arithmetic and logic functions as directed
3 A programming language frequently used with microcomputers (abbr.)
5 An external or remote device in a computer system, such as a printer
6 The passage of information into or out of the computer
8 A fingernail-size semiconductor made of silicon that can hold thousands of bits of information
10 A programming language (example, abbr.)
11 Data transferred from the computer memory to a storage device
12 The act of obtaining data stored in the computer system
19 1,024 bytes of information that can be stored in the computer system



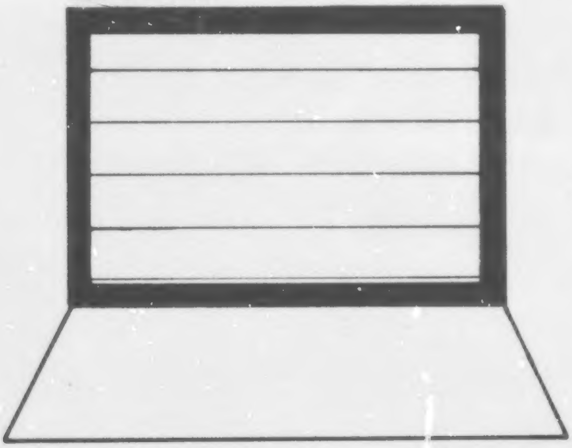
35.

COMPUTER DATA

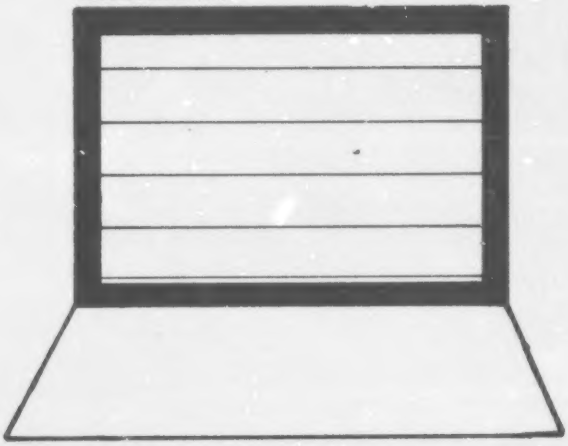
Directions:

Go to the library, visit a computer store, or talk to someone who owns a microcomputer to obtain the following information:

TITLES OF 5 BOOKS ABOUT COMPUTERS



TITLES OF 5 COMPUTER MAGAZINES



Read an article about home uses of microcomputers. Write a brief summary of the article in the space below. Include the name of the magazine, title of the article, author, and date.

36.

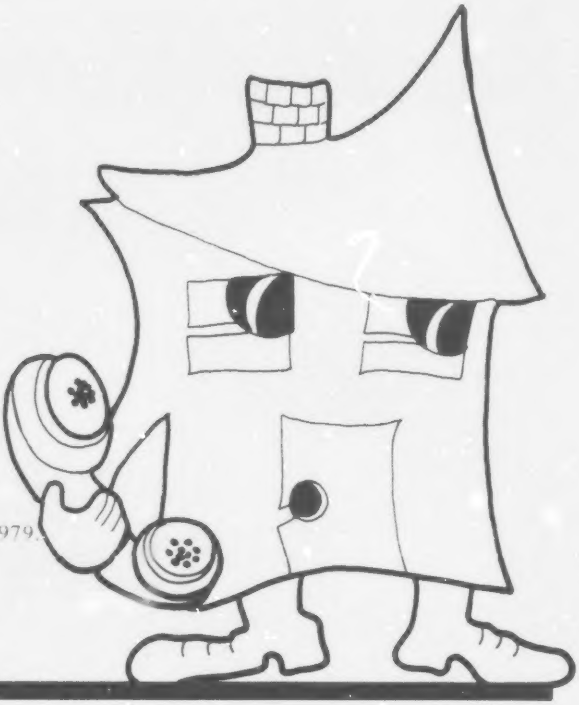
WHERE'S THE COMPUTER?

Fred the House[1]

You're at work. The phone rings. It's Fred, your house. While monitoring the morning news reports for stories of recent burglaries, Fred picked up a weather builetin warning of pending heavy rain. This jogged Fred's bubble memories to run a routine room maintenance check. A potential leak was found. Before calling you, Fred phoned Slim for advice. Slim is a ranchstyle home down the block. Fred and Slim often share data banks and each know they are programmed with an effective search technique for identifying household services. You've learned to trust Fred's judgment, so you approve the repairs. The rest is rather straightforward. Fred calls the roofer . . . ."

This fantasy is funny. Yet is accurately captures the flavor of life in our computerized future. Computers are probably already touching your life more frequently than you realize.

Directions:
For one day try to identify as many ways as possible that computers affect your life. Write these ways in a list below. Compare your list with those of classmates.



[1] Alan P. Hald. "Fred the House." *Micro Shopper*, Spring 1979.

37.

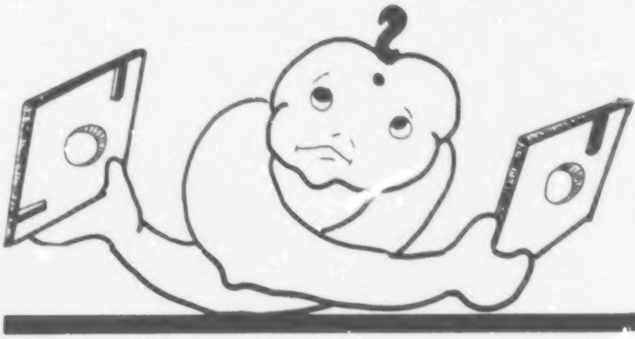
HOME COMPUTERS: DON'T BE A BEWILDERED BUYER

Directions:
Visit computer stores or departments in your area to obtain information on three different brands of personal computers. Find information to fill in the chart below. Record the information you obtain in the chart.

Factors to Evaluate	Computer Name and Model		
Cost			
Hardware Included			
Software Included (general categories)			
Basic System Price			
Needed Options			
Options Which Could Be Added Later			
Memory (in K's)			

HOME COMPUTERS: DON'T BE A BEWILDERED BUYER (CONT.)

Factors to Evaluate	Computer Name and Model		
Keyboard Configuration			
Programming Language(s)			
Program and Data Storage (cartridge, cassette, or disk)			
Documentation (type and quality)			
Ease of Usability			
Service Policy (yes or no; if yes, describe)			



38.

COULD YOU LIVE WITHOUT IT?

Directions:
List 10 items which you personally use at home that use electricity.

1. ______________________ 6. ______________________
2. ______________________ 7. ______________________
3. ______________________ 8. ______________________
4. ______________________ 9. ______________________
5. ______________________ 10. ______________________

Directions:
Pretend that the nation is suffering from a power shortage. Draw a line through three items in the list above that you could live without.

Directions:
Pretend that the nation is still unable to function. List the items from the top of this page again and explain how you could replace each one without using electricity.

1. ____
2. ____
3. ____
4. ____
5. ____
6. ____
7. ____
8. ____
9. ____
10. ____

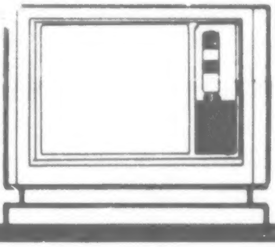
39.

THE COST OF USING APPLIANCES

Electricity is a major home expense. The chart below and on the next page lists figures published by Underwriters Laboratories (UL) showing the average wattages and yearly hours of use of common home appliances. The costs of operation were calculated using 7.10 as the estimated national average residential charge per kilowatt-hour (kwh), based on figures from the Department of Energy.

Directions:
To estimate the yearly cost of *your* family's appliances, ask your electric company for the local kwh rate. Multiply that rate by the appropriate figure from the column in the chart below labeled "Average kwh Used per Year." (Or for a more realistic accounting, multiply the actual wattage of your family's appliance by the average number of hours used per year, divide by 1,000 to get kwh, then multiply the results by your local kwh rate to get the annual electricity cost for that appliance.) Record this yearly cost of using each of your appliances in the column provided on the chart.

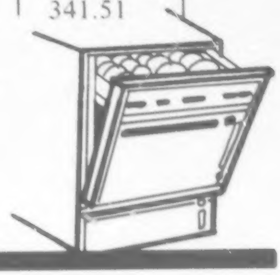
Appliance	Average Wattage	Average hours used per year	Average kwh used per year	Yearly Cost at 7.10¢ per kwh	Yearly Cost
air cleaner	50	4,320	216	15.34	
air-conditioner, window	1,556	750	1,175	83.43	
blanket	177	831	147	10.44	
blender	386	39	15	1.07	
broiler	1,436	70	100	7.10	
clock	2	8,760	17	1.21	
clothes dryer	4,856	204	993	70.50	
coffee maker	894	119	106	7.53	
deep fryer	1,448	57	83	5.89	
dehumidifier	257	1,467	377	26.77	
fan, attic	370	786	291	20.66	
fan circulating	88	489	43	3.05	
fan, rollaway	171	807	138	9.80	
fan, window	200	850	170	12.07	
floor polisher	305	49	15	1.07	
freezer, 15 cubic feet	341	3,504	1,195	84.85	
freezer, frostless 15 cubic feet	440	4,002	1,761	125.03	
frying pan	1,196	157	188	13.35	
hair dryer	381	37	14	0.99	
heater, portable	1,322	133	176	12.50	
heating pad	65	154	10	0.71	



THE COST OF USING APPLIANCES (CONT.)

Appliance	Average Wattage	Average hours used per year	Average kwh used per year	Yearly Cost at 7.10¢ per kwh	Yearly Cost
hot plate	1,257	72	90	6.39	
humidifier	177	921	163	11.57	
iron	1,006	143	144	10.22	
mixer	127	102	13	0.92	
oven, microwave	1,500	200	300	21.30	
oven, self-cleaning	4,800	239	1,147	81.44	
radio	71	1,211	86	6.11	
radio/phonograph	109	1,000	109	7.74	
range	8,200	128	1,050	74.55	
refrigerator, 12 cubic feet	241	3,021	728	51.69	
refrigerator, frostless 12 cubic feet	321	3,791	1,217	86.41	
refrigerator, frostless 14 cubic feet	326	3,448	1,124	79.80	
refrigerator/freezer 14 cubic feet	615	2,947	1,812	128.65	
roaster	1,333	154	205	14.56	
sewing machine	75	147	11	0.78	
sun lamp	279	57	16	1.14	
toaster	1,146	34	39	2.77	
TV, b&w (tube)	160	1,500	240	17.04	
TV, b&w (solid state)	55	1,500	83	5.89	
TV, color (tube)	400	1,500	600	42.60	
TV, color (solid state)	200	1,500	300	21.30	
vacuum cleaner	630	73	46	3.27	
vibrator	40	50	2	0.14	
waffle iron	1,116	20	22	1.56	
washing machine automatic	521	198	103	7.31	
washing machine nonautomatic	286	266	76	5.40	
waste disposer	445	67	30	2.13	
water heater	4,474	1,075	4,810	341.51	

Source: "The Cost of Using Your Appliances," *Changing Times* 37:24, February 1983.



40.

ENERGY RATINGS FOR APPLIANCES

Now you can compare operating costs when you shop for a washer, refrigerator, or other major appliance. To do this, look for the big yellow label.

Directions:

Check the EnergyGuide labels on three models of a major appliance--water heater, freezer, refrigerator/freezer, dishwasher, clothes washer, or room air conditioner--of similar capacity. List the information provided on the labels in the left column below. Then list the energy ratings for each model.

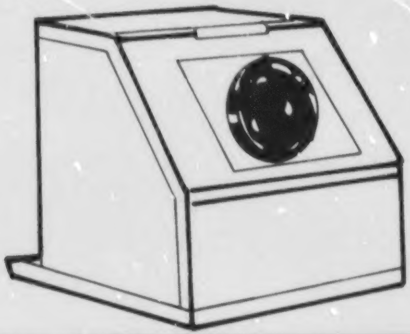
	ENERGY RATING		
Information Provided	**Model 1**	**Model 2**	**Model 3**

Notes:

An Energy Cost Label is used on refrigerators, refrigerator/freezers, and water heaters. Dishwashers and clothes washers bear a variation of the label indicating costs of running the appliance with an electric water heater and with a gas water heater.

An Energy Efficiency Label is used on room air conditioners.

Furnaces bear only a generic label with fuel conserving tips. The contractor has specific information regarding energy efficiency on Energy Fact Sheets and can help you compare the energy efficiency of different models.



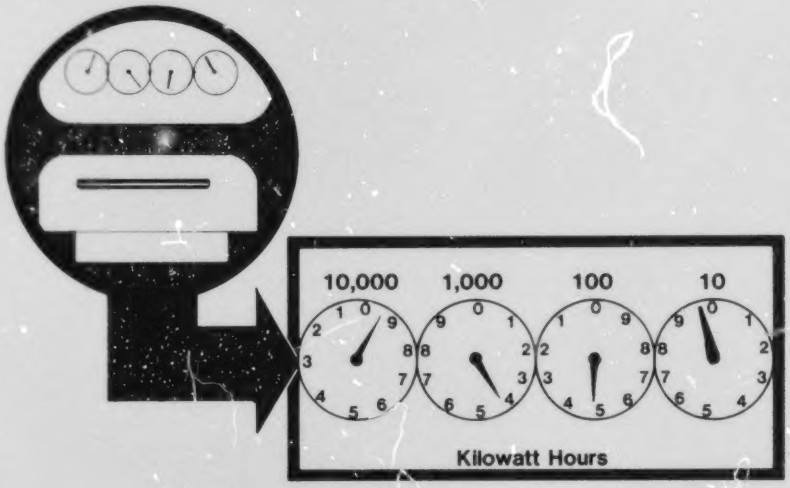
41.

HOW TO READ YOUR ELECTRIC AND GAS METERS

Directions:

Reading your own utility meters is an easy way to keep tabs on the amount of energy you use. Study the information below about reading electric and gas meters. Then answer the questions that follow.

YOUR ELECTRIC METER

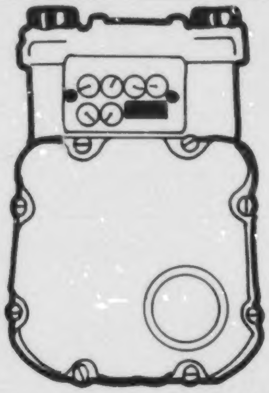


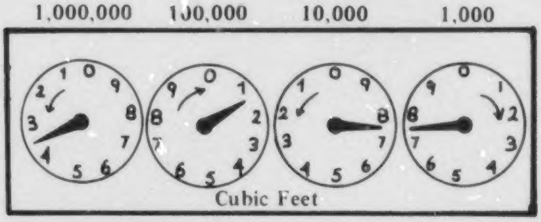
An electric meter records your use of kilowatt-hours of electricity. To interpret an electric meter:

1. Read dials from left to right. (Note that numbers run clockwise on some dials and counterclockwise on others.)
2. The figures above each dial show how many kilowatt-hours are recorded each time the pointer makes a complete revolution.
3. If the pointer is between numbers, read the smaller number. (The 0 stands for 10.) If the pointer is pointed directly at a number, look at the dial to the right. If that pointer has not yet passed 0, record the smaller number; if it has passed 0, record the number the pointer is on. For example, in the figure above, the pointer on the first dial is between 0 and 9—read 9. The pointer on the second dial is between 5 and 4—read 4. The pointer on the third dial is almost directly on 5, but the dial on the right has not reached 0 so the reading on the third dial is 4. (You would read the third dial as 5 after the pointer on the 10 kwh dial reaches 0.) The fourth dial is read 9. Thus, the total reading is 9,449.
4. This reading is based on a cumulative total—that is, since the meter was last set at 0 (zero), 9,449 kwh of electricity have been used. To find your monthly use, take two readings a month apart, and subtract the earlier one from the later one.
5. Some electric meters have a constant, or multiplier, indicated on the meter. You follow the same steps as outlined above, and then multiply the usage reading by this number. This type of meter is primarily for high-usage customers.

HOW TO READ YOUR ELECTRIC AND GAS METERS (CONT.)

YOUR GAS METER





A gas meter tallies the number of cubic feet of natural gas that you have used. Read it as you would an electric meter. The figures above each dial show how many cubic feet of natural gas are recorded each time the pointer makes a complete revolution.

From left to right in the illustration above, the dials register 3,177. This is not the final reading, however. It must be multiplied by 100 because each time the pointer on the right-hand dial moves from one number to another, the use of 100 cubic feet of natural gas has been recorded. Thus, the total reading is 317,700 (3,177 X 100). Since the meter was last set at 0 (zero), it has recorded the use of 317,700 cubic feet of natural gas.

Some gas meters have more than four dials. If yours does, and you cannot decide by what number to multiply the reading, call your gas company for directions.

Apply Your Meter-Reading Skills

Directions:
Complete the meter reading activities below and record the results in the spaces provided.

1. To estimate how much gas or electricity your family's heating system uses, read the meter right after your family goes to bed and again before it gets up. (Readings are taken while the family sleeps because it is unlikely that during that time any lights or appliances other than clocks or refrigerator/freezers, will be on.)

   Subtract the evening reading from the morning reading to find out how much energy was used for heating during the night. Divide that amount by the number of hours between readings; the answer will yield the number of either kilowatt-hours or cubic feet of natural gas used per hour.

   ______ *Morning reading*
   ______ *Evening reading*
   ______ *Amount used*

   (Amount used) / *(Hours between readings)* = ______ *(Amount used per hour)*

HOW TO READ YOUR ELECTRIC AND GAS METERS (CONT.)

2. To tell how much energy your air conditioning system uses, take two readings one hour apart while the air conditioner is on. Record these readings in the first column below. Then subtract the earlier reading from the later one to see how much electricity was used in that hour.

   Repeat the process while the air conditioner is off; record the information in the second column below. Then subtract the amount of electricity used when the air conditioner was off from the amount used when the air conditioner was on. This will give you an estimate of the amount of electricity used by the air conditioner in one hour.

With Air Conditioner On **_With Air Conditioner Off_**

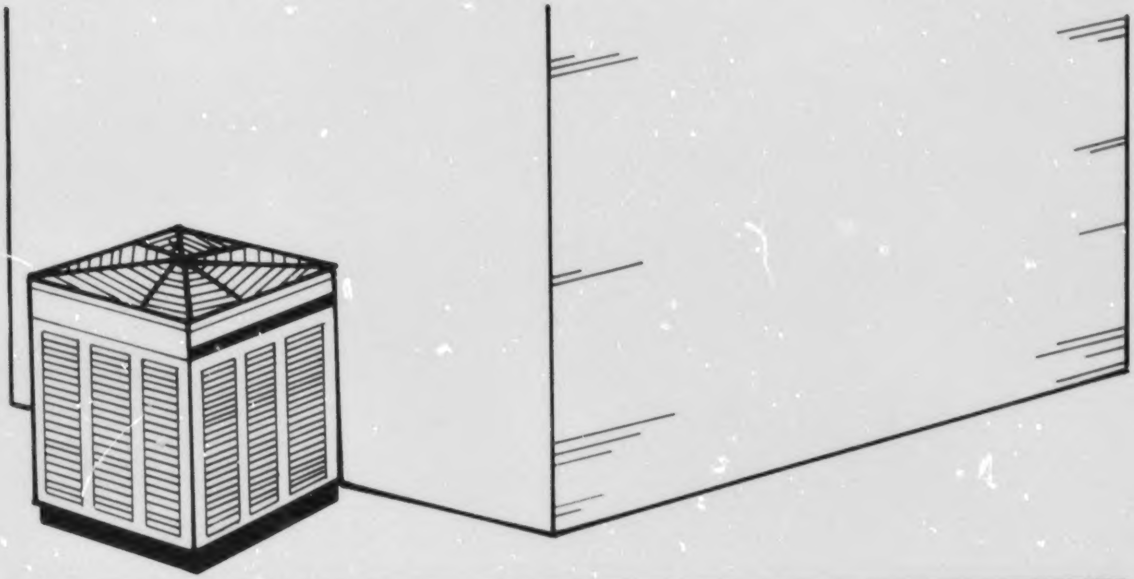
__________ *Second reading* __________ *Second reading*

__________ *First reading* __________ *First reading*

__________ *Amount used* ***MINUS*** __________ *Amount Used* ***EQUALS*** __________

A WORD OF CAUTION—The answers yielded by these calculations are only *very rough* indications of how much energy is used. Many factors determine the amount of energy needed to heat or cool a home: the weather outside, the number of people inside, the number of appliances used, and so forth. Nevertheless, doing the kinds of checks described above will give you an idea of how your energy is used.

Source: "How to Understand Your Utility Bill." Washington, DC: U.S. Department of Energy, 1980.



42.

HOW TO UNDERSTAND YOUR ELECTRIC AND GAS BILLS

Next time your family receives a utility bill, spend a few minutes with it and make sure you understand the charges. (Or study the utility bill provided by your teacher.) Compare it to bills for the previous month or for the corresponding months of the previous year to see if your energy use has decreased or increased.

YOUR ELECTRIC BILL

Directions:
Find and record the following information from a monthly electric bill.

____________ Account number.
____________ Code showing which rate schedule was applied to the bill.
____________ Code showing whether the bill was estimated or whether the meter was read.
____________ Date on which the billing period ended.
____________ Number of kilowatt-hours the meter registered when the bill was tabulated.
____________ Itemized list of charges.
____________ ____
____________ ____
____________ ____
____________ ____
____________ Number of kilowatt-hours used during the billing period.
____________ Total amount owed.
____________ Environmental surcharge.
____________ County energy tax.
____________ State sales tax.
____________ Fuel cost adjustment.
____________ Date on which bill, if unpaid, becomes overdue.
____________ Amount due now.
____________ Amount that must be paid if the bill becomes overdue.

How much of the bill is for electricity? ________________________________*

How much does each kilowatt-hour cost? ________________________________*

What is the minimum charge for electricity? ________________________________*

* You may have to contact the local electric company to obtain this information.

HOW TO UNDERSTAND YOUR ELECTRIC AND GAS BILLS (CONT.)

YOUR GAS BILL

Directions:

Find and record the following information from a monthly gas bill.

____________ Account number.

____________ Sales tax.

____________ Date on which the bill, if unpaid, becomes overdue.

____________ Code indication of charges included in this bill.

____________ Number days of service covered by this bill.

____________ Date on which billing period ended.

____________ Number of cubic feet of natural gas the meter registered when this bill was tabulated.

____________ Itemized list of charges.

____________ ____

____________ ____

____________ ____

____________ ____

____________ The amount of gas–expressed in hundreds of cubic feet–used during this billing period.

____________ The number of therms (amount of heat produced; one therm equals 100.00 Btu's) contained in every hundred cubic feet of gas received.

____________ The amount owed if bill is paid on time.

____________ Amount that must be paid if the bill becomes overdue.

____________ Temporary surcharge granted to the company by the utility commission until the commission has had time to decide whether or not to raise the company's rates.

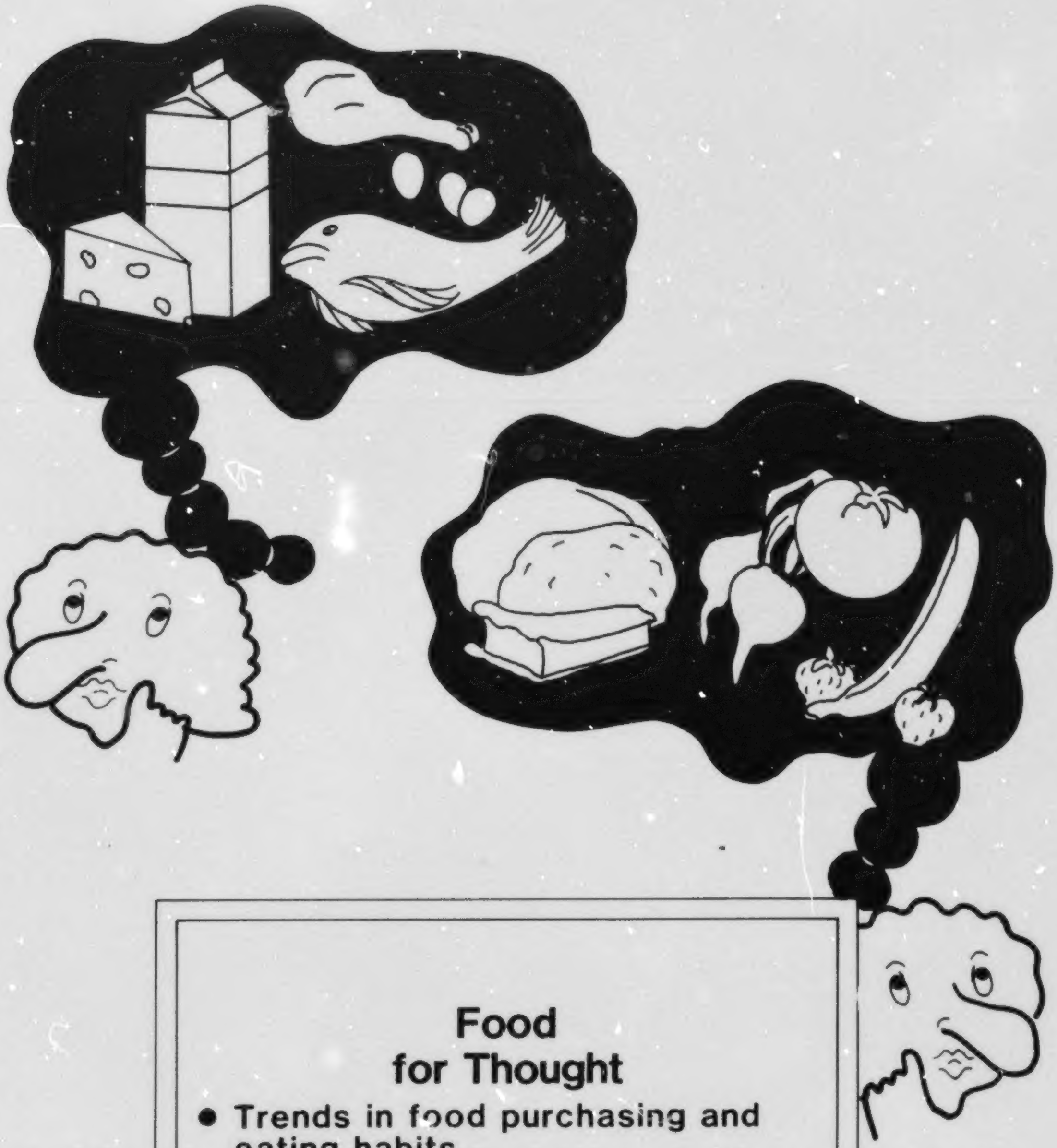
____________ Purchased gas adjustment (PGA) charge.

How much of the bill is for gas? ____*

How much does each therm cost? ____*

What is the minimum charge for gas? ____*

* As in the case with the electric bill, you must get a copy of the relevant rate schedule from the local natural gas company if you want to know either how much of the bill is owed because of the gas you used or how much each therm costs. Like the electric bill, the gas bill may contain a minimum charge.



Food for Thought

- Trends in food purchasing and eating habits
- New foods in town
- Saving money with coupons, refunds, and generics

TRENDS IN FOOD PURCHASING AND EATING HABITS

- Wellness is becoming the American way. Americans, in pursuit of healthier bodies, are buying cookbooks, diet aids, vitamin and mineral supplements, and health club memberships.

- Several patterns are emerging in American eating habits. Americans are eating more poultry, low-fat milk, cheese, and vegetables. The consumption of sugar, salt, coffee, and beef has dropped significantly.

- Yogurt, a relatively new food in the 70's, has increased in popularity nearly 200 percent in the 80's.

- Packaging which will allow milk to be stored at room temperature has been perfected and will be on the market soon.

- In the five years preceding 1982, Americans consumed 25 percent more soft drinks than in the five years preceding 1976.

- Through the 1900's Americans have been increasingly absent from family meals. In the 1940's, a major American magazine reported that families eating lunch together were in the minority. Another source in the 1950's reported that few American families ate breakfast together. Presently, Americans are forcing family dinners into extinction. Many Americans eat whenever and whatever they feel like, and some may have many small meals instead of three large ones.

- Nearly 50 percent of all Americans eat lunch away from home with about 11 percent eating brown bag lunches.

- Better than one out of five meals eaten in this country are eaten out in a food service setting. Better than one out of three dollars spent for food is spent in food service establishments. On the average, there are 187 million customer transactions a day in the food service industry. This includes both meals and snacks.

- Another trend in American eating habits is the disappearance of dinner table conversation. One-third of all Americans, according to one survey, watch television while eating. Restaurants have begun to offer small television sets to customers so they can see their favorite shows while enjoying a meal out.

- While the costs of producing foods have changed only slightly over the past few years, the energy used to produce, process, transport, display, and prepare the food continues to increase.

- Fuel is used to get food to Americans. Meat may be shipped from Kansas City, fruits from Florida, salad vegetables from California, coffee from Brazil or Columbia, and sugar from Hawaii. A cake made from a prepackaged cake mix made of flour, shortening, salt, and flavorings may originate in any of 50 states, be packaged in another state, and the package printed in still another state.

- Shoppers are experimenting with "cashless" grocery buying. After purchases have been totaled at the check-out counter, the customer presents a plastic card which contains bank account information. A computerized check-out counter takes this information and automatically transfers funds from the customer's account to the store's account.

NEW FOODS IN TOWN

- Supplementing conventional foods with little-known crops and food from the sea may give millions a better chance for adequate nutrition in the years ahead. Agricultural scientists around the world are studying promising new crops including the following:

CROP	EDIBLE PRODUCTS
Winged bean	Seeds which have as much oil and protein as soybeans
	Starchy roots which contain many times the protein of potatoes

CROP	EDIBLE PRODUCTS
Lablab bean	Pods which, when young, make a tasty table vegetable
	Leaves and flowers which can be eaten like spinach
	Seeds which can be made into high-protein concentrate
Marama bean	Beans and roots which contain about as much protein and oil as soybeans and are tasty roasted
Amaranths	Grains which are exceptionally high in protein
	Leaves which can be boiled and eaten as a green vegetable
Buffalo gourd	Seeds which are rich in protein
	Edible roots which can weigh as much as 60 pounds
Quinua	Grain-like seeds that are high in protein
	Seeds which contain up to 50 percent protein and between 14 and 24 percent oil

- Oceans, lakes, and rivers cover over 70 percent of the world's surface. Yet, today marine foods make up only a fraction of one percent of total food production. But a rapid increase in world fish production is not at hand in the 1980's. Any increase in the contribution of fish to human nutrition will depend not so much on catching more fish but on better distribution of the fish already caught, reducing waste, and changing current patterns of consumption and use.

- By the turn of the century, stores may stock "generic" protein protein derived from many different sources and sold in a block which could be cooked into "imitation steak" or other forms resembling traditional foods.

- Americans are growing more of their own food in backyard, community, and rooftop gardens. This information is reported in a 1982 survey by the National Association for Gardening. The majority of households surveyed gave saving money as their main reason for gardening.

- A scientist at the U.S. Department of Agriculture has invented a tasting machine which will aid researchers in developing new strains of fruits and vegetables. Formerly a panel of tasters has been necessary to judge and record flavor qualities.

SAVING MONEY WITH COUPONS, REFUNDS, AND GENERICS

- Coupons and refund offers have been available for years, but only in recent years have Americans from all income levels begun cashing them in for savings. The amount of money saved by consumers is based on the amount of time and energy they are willing to spend on the project and the products which are purchased. Money spent on products which will not be used is not money saved, even if a coupon is used.

- Coupons are frequently issued for newly manufacturered products. In order to take full advantage of these coupons, try to be creative in menu planning. Sometimes the ad from which the coupon is clipped contains several recipes for the use of the product. These hints may help you know how to best use the product.

- Manufacturers also offer refunds to consumers when they buy certain products. Cash, free merchandise, a coupon for a discount on an item, or a free item are sometimes available from manufacturers as part of refund offers. Refund offer blanks are issued in magazines and newspapers and are found in grocery stores.

- Unadvertised products in plain black and white packages are called generic products. Some generic products cost much less than private or national brands. Prices may be 30 percent less than private brands and 50 percent less than national brands. Most generic products are produced in only one size. Costs are lower because of the way the product is packaged and produced. Additional money is saved because the products are usually not advertised.

- The nutritional quality of the generic foods may be the same as private or national brands because of government regulations that apply to nutrition. However, the appearance and flavor *may not* be the same. The quality may be different because the ingredients used in generic foods are usually standard grades. Extra-standard or fancy grades are usually used in national products and many private brand products.

- Certain products, whether generic or store brands, must contain the same ingredients. These foods have standards of identity set by the government. The U. S. government has established mandatory recipes or lists of ingredients for 17 groups of foods such as mayonnaise, catsup, peanut butter, and ice cream. Generic brands, assuming they are less expensive, may be especially good choices for these products.

- Grocery stores generally group all generic products together. A few stores have the generics scattered throughout the store next to the national and store brands. Products commonly found in the generic section include canned fruits and vegetables, jellies and jams, gelatin dessert mixes, cakes mixes, baking products, soaps, detergents, paper products, and dog and cat food.

- Stores may not have a constant supply of generic products. For example, one week a store may have only generic chocolate cake mix and the next week have only yellow cake mix. The consistency among generic mixes may also vary greatly, depending on the manufacturer. The same product purchased on two separate occasions may be completely different.

43.

CORNHUSKING

Directions:
List below 10 products made from corn. Which of these products do you think were made from corn in 1880? Place an X in the box by these items.

☐ 1.
☐ 2.
☐ 3.
☐ 4.
☐ 5.
☐ 6.
☐ 7.
☐ 8.
☐ 9.
☐ [illegible]0.

Try to think of three new corn products which might be developed in the future.

1.
2.
3.

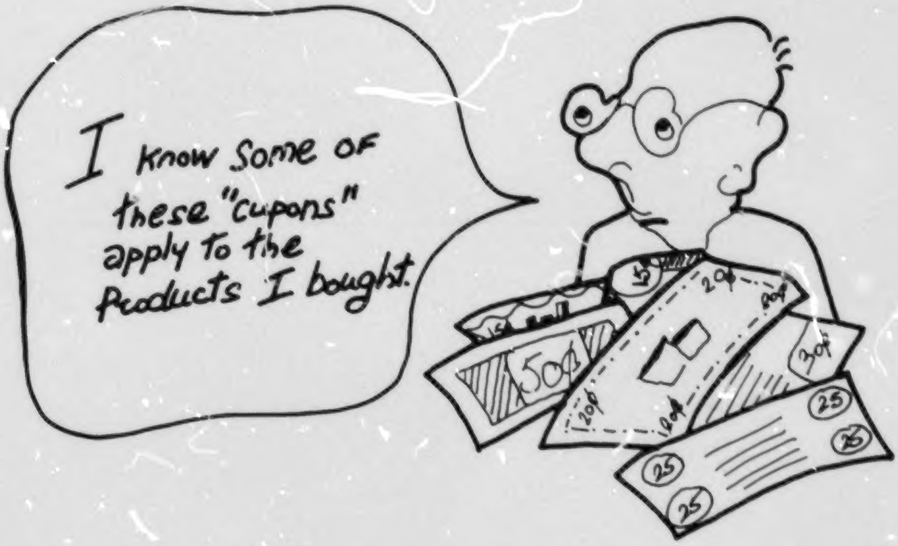
What effects do new food products have on consumers?

44.

PICTURE THIS

Directions:
Study the captioned cartoons below and answer the questions following each in the space provided.

CARTOON A


I know some of these "cupons" apply to the products I bought.
50¢
20¢
30¢
25

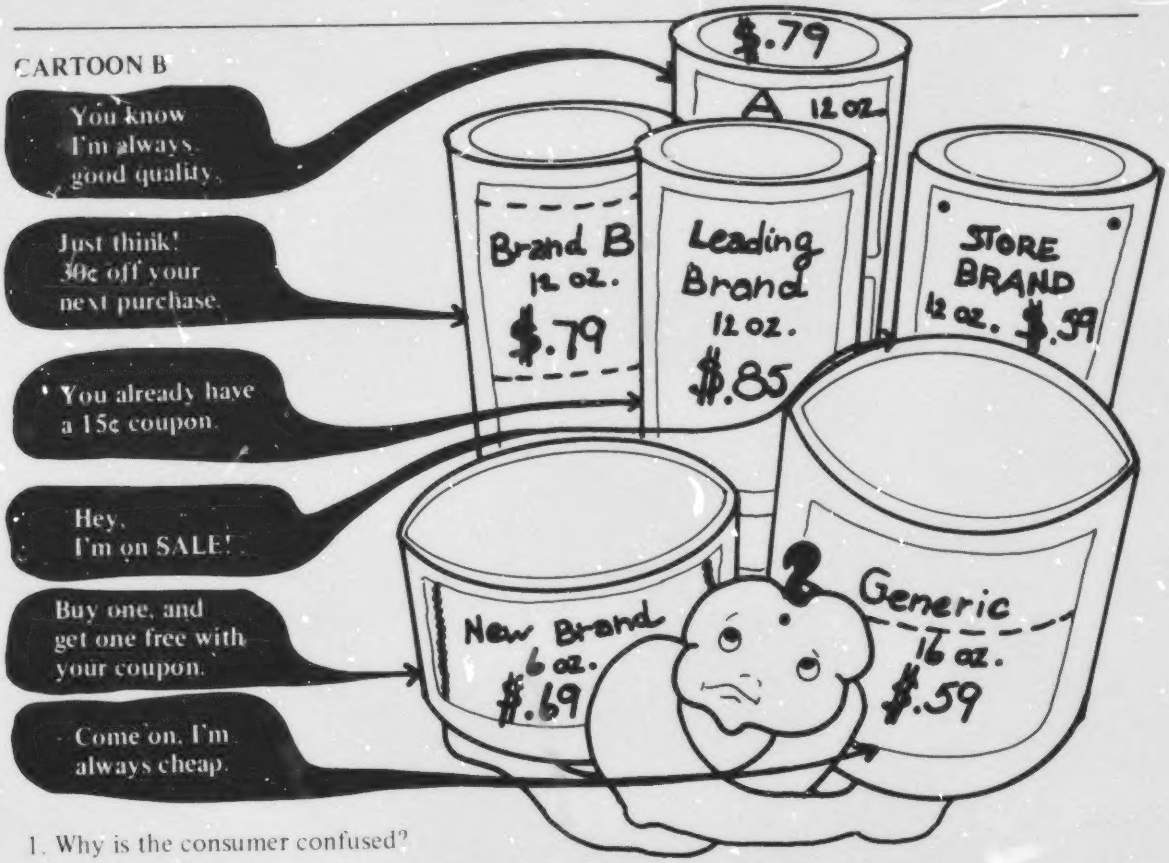
1. Identify the problem the consumer has encountered in the cartoon.

2. What could be done to remedy the problem?

3. Outline a plan to organize coupons, refund offers, and proof-of-purchases.

PICTURE THIS (CONT.)

CARTOON B


You know I'm always good quality.
Just think! 30¢ off your next purchase.
You already have a 15¢ coupon.
Hey, I'm on SALE!
Buy one, and get one free with your coupon.
Come on, I'm always cheap.
$.79
A 12 oz.
Brand B 12 oz. $.79
Leading Brand 12 oz. $.85
STORE BRAND 12 oz. $.59
New Brand 6 oz. $.69
Generic 16 oz. $.59
?

1. Why is the consumer confused?

2. Figure the total cost per ounce for each product. Which is the least expensive? Which is the most expensive?

3. Determine factors (other than cost) that would affect the buying decision.

45. IN THE KNOW ABOUT COUPONS AND REFUNDS

Directions:
For each coupon offer described below, identify essential information about the coupon offer. Write the information in the space provided.

FORM A
FREE
32 ounce bottle of Diamond Limon Carbonated Fruit Punch. The punch with POW! This offer good for one (1) free bottle of Diamond Limon Carbonated Fruit Punch No purchase necessary. Expiration Date: December 31, 1988.

Product ______________________ Size ______________ Expiration Date ______________

How to Use ____

____

FORM B
SAVE $2.00 on a 20 ounce package of Mr. Cod's Famous Fish Fillets

To receive a coupon worth $2.00 off on a 20 ounce package of Mr. Cod's Famous Fish Fillets, send three (3) proof of purchase emblems from specially marked packages of Mr. Cod's Famous Fish Fillets and your name and address printed on a 3" by 5" card to:

Fish Offer
P.O. Box 958
White Salmon, Maine 21953

Offer limited to one coupon per address. Offer expires 5-9-90.

Product ______________________ Size ______________ Expiration Date ______________

How to Use ____

____

IN THE KNOW ABOUT COUPONS AND REFUNDS (CONT.)

FORM C
Free FRESH'N BRIGHT toothpaste

Send the universal product code and the label from the package of three ten-ounce tubes of Fresh 'N Bright toothpaste, and receive a coupon for a free 10-ounce tube of Fresh 'N Bright toothpaste. Fill in the information on the back of this form. Send this form and the required proof of purchase to: Fresh 'N Bright Savings Program, P. O. Box 111, West Bend, CA 89734. No limit.

Offer Expires 12-31-88

Product ______________________ Size __________ Expiration Date __________

How to Use ____

____

FORM D
40¢ SAVE 40¢ 40¢

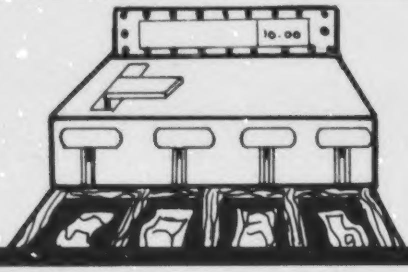
on your next purchase of Swiss Fudge Chocolate Sauce (15 ounce size). Offer good only on specified product and size. One coupon per purchase.

40¢ 40¢

Product ______________________ Size __________ Expiration Date __________

How to Use ____

____



46.

WHAT'S IN A LABEL?

Directions:
Compare labels for a food product which is available in generic, store brand, and name brand. For each product list the price, the ingredients in the order they appear on the label, and any descriptive information given about the product. Open the products and compare their appearance and taste.

Product ______________________________

	Generic Brand	Store Brand	Name Brand
Price			
Ingredients			
Description			
Appearance			
Taste			

What appears to be the primary differences among the three products?

What would be appropriate uses for each product?

MOONAR
CAN - CAN
BEEF

47.

CHOOSE THE BEST BUY

Directions:
In each of the following situations the consumer has to decide which product is best for his or her needs. Figure the unit price for each item. Then based on a unit price comparison and intended use, decide which product you think should be purchased and explain why you chose that product. Also tell, when, if ever, the other product might be the best choice.

1. Bob needs to get some rice for a casserole he is making. Bob uses rice mainly in casseroles.

GENERIC BRAND RICE, 12 OZ., 75¢
NAME BRAND RICE, 14 OZ., $1.39

A. What is the unit price for each? ______________________

____

B. Which should he buy? ______________________

C. Why? ______________________

____

D. When would the other product be preferred? ______________________

____

2. Carmen is serving a fruit salad for supper. She needs some canned peaches for the salad.

IRREGULAR PIECES GENERIC BRAND PEACHES, 1 LB. 3 OZ., 79¢
SLICED YELLOW CLING NAME BRAND PEACHES, 1 LB. 3 OZ., 89¢

A. What is the unit price for each? ______________________

____

B. Which should she buy? ______________________

C. Why? ______________________

____

D. When would the other product be preferred? ______________________

____

CHOOSE THE BEST BUY (CONT.)

3. Jill and Todd are looking for paper towels for their kitchen and workshop. They have tried the generic brand of paper towels. It is rougher and less absorbent than the national brand.

119 1-PLY (11 X 9.4 in.) GENERIC BRAND PAPER TOWELS, 45¢
92 2-PLY (11 X 11 in.) NATIONAL BRAND PAPER TOWELS, 99¢

A. What is the unit price of each? ______________________________

____

B. Which should they buy? ______________________________

C. Why? ______________________________

____

D. When would the other product be preferred? ______________________________

____

4. Jake's mom asked him to get some aspirin on his way home from school. He has to decide which product to buy.

250 CT. GENERIC BRAND ASPIRIN, $1.29
200 CT. NAME BRAND ASPIRIN, $3.19

A. What is the unit price for each? ______________________________

____

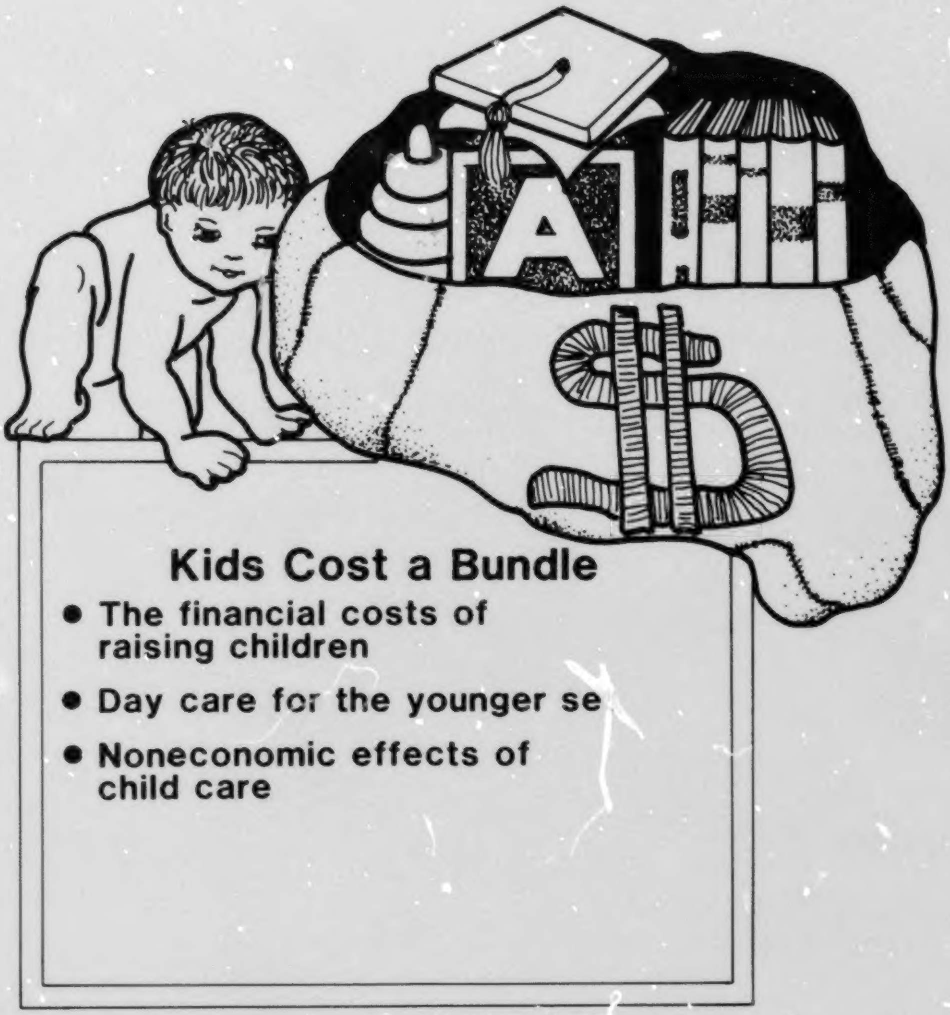
B. Which should he buy? ______________________________

C. Why? ______________________________

____

D. When would the other product be preferred? ______________________________

____



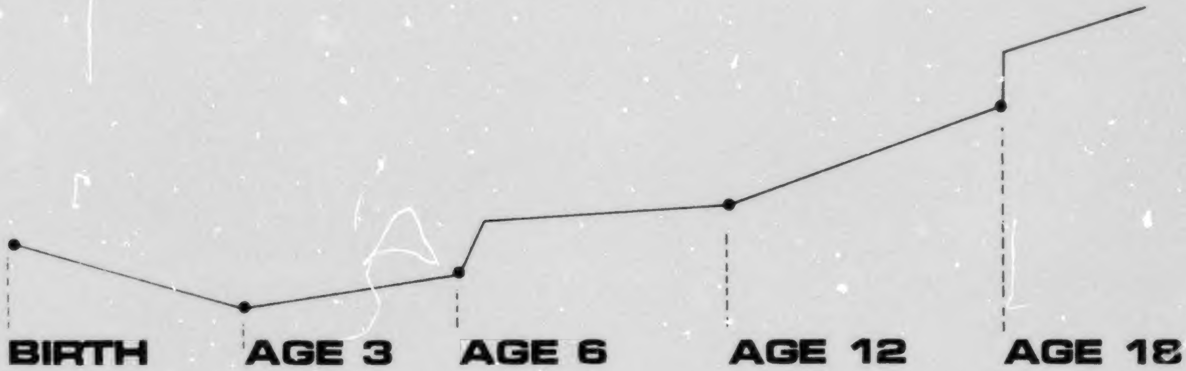
Kids Cost a Bundle

- The financial costs of raising children
- Day care for the younger set
- Noneconomic effects of child care

THE FINANCIAL COSTS OF RAISING CHILDREN

- The cost of children is a factor with many families. Granted, the cost of raising children is not as obvious as the price of a new home. Child rearing can be divided into smaller areas of food, clothing, shelter, entertainment and such things as music lessons, sports equipment, and new shoes.

- The financial life cycle for a child looks something like this graph.



- Costs of birth are high along with formula, diapers, and other baby necessities. Costs drop from birth to age 3 and may make up only a slight rise until the child enters school. The costs begin to rise at age 6 or so as the child begins to make friends in school and gets involved in music lessons, athletics, and summer camps. Costs remain on a slight increase until junior high when the cost of feeding and transporting a teenager jumps drastically.

- High school costs constantly increase and continue to increase as children leave home. According to one source, the greatest costs for a teenager's family are food and transportation. Attending college or technical training may be a consideration for some families. Other families will face the costs of weddings and helping a young couple establish their own home.

- One economist says, "Young people have a right to know what it will cost to raise a child and they have the right to make decisions based on real data. It is important that young couples understand the financial planning implications of having a child.

- What will raising a child born in 1980 really cost? The United States Department of Agriculture (June 1983) says it will cost $83,447 for the average family to raise a child to age 18. Another analysis concludes that a two-parent family with an income of $29,500 can expect to spend around $226,000 in 1982 dollars–$28.12 a day–to raise and educate a son born in 1980 to age 22, including paying for four years at a private residential college. Girls are about 10 percent more expensive to support. For both boys and girls, about one-third of the total cost comes in the last four years. Large families are considerably costlier than those with one or two children, although each extra child costs less than the first. Those dollar estimates are not exact for all families, but they do show the high cost of raising children, information needed by anyone considering parenthood. The table on the next page shows another cost breakdown.

THE COSTLY ROAD TO ADULTHOOD[1]
(Total Cost for Two Children)

Food at Home	$ 86,632
Housing	94,618
Clothing	13,065
Transportation	35,710
Health	25,539
Other	43,910
	$299,474*

*These estimates are in 1982 dollars for parents with an income of about $30,000 whose paychecks will stay even with inflation. The grand total is just under a third of this family's expected gross income. The tab for just one male child is: $214,956.

[1] "Facing up to the High Cost of Kids." *Changing Times*, April 1983, pp. 28-32.

DAY CARE FOR THE YOUNGER SET

- With the increasing numbers of women working after the birth of their children, the need for day care centers will increase over the next two decades.

- The Bureau of Labor Statistics reported in 1977 that the percentage of working-age women holding jobs reached a new high of 56 percent. More than half of all married women with school-age children hold some kind of job. Three million full-time working mothers are also heads of single-parent families.

- Among mothers of children under the age of six, 32 percent are working today compared with 14 percent in 1950.

- Pressure is predicted to increase for government to provide and/or finance day care and after school programs for children.

- A 1980 Gallop Poll reported that 56 percent of those polled approved of direct government funding for day care centers; 67 percent hoped for tax credits for businesses who provide on-site day care for employees' children; and 70 percent approved of tax credits for families to help them meet child care costs.

- Policies for working which include flextime and schedules outside of the traditional 8 to 5 mean that child care must be made available at all times of the day and night for families with non-traditional schedules.

NONECONOMIC EFFECTS OF CHILD CARE

- The U. S. Department of Health and Human Services has identified three aspects of quality child care. They are:
  - a caregiver who provides warm and loving care and guidance for children,
  - a setting (home or day care setting) that keeps children safe, secure, and healthy, and
  - activities that help children grow mentally, physically, socially, and emotionally.

- Much of the research of the 1970's centered on the quality of day care. Studies were conducted comparing the development of children who were kept at home with a traditional mother with counterparts in a day care setting. One futurist says that three issues relating to day care will surface. They are:
  - day care will cost a lot of money,
  - good day care may cost more than mediocre day care, and
  - good day care may not be available at any cost in some localities.

- In a study of working and nonworking mothers of similar age, nonworking mothers generally believed they alone should care for their children. The working mothers, according to the study, were much more able to make decisions about their children without advice from others. The infants did not differ in social development. However, those whose mothers were at home showed some stress with strangers.

- At present, early childhood education is a cooperative process which affects the child along with home and family experiences. Most children today have a broader range of experiences with people than children did in the past.
- Research indicates that if Mom is happy with her working situation she is also generally happy with her child care situation. However, if she is dissatisfied with her job, she frequently experiences difficulties with child care.
- Futurists predict that the increased number of step-families and the increased use of day care will mean that many more people will be involved in caring for children, providing role models, and giving emotional support.
- Some American and foreign companies are offering day care as a benefit for employees. One large firm which offers day care finds that employees and the employer both have something to gain. Absenteeism, tardiness, and high turnover rates seem to be reduced by company day care.
- One business magazine reports that child care may be the most promising consumer market of the 1980's. Currently, about five percent of all day care children are in publicly subsidized child care programs with 20 percent in private day care facilities. Children of other workers stay with family or friends for day care. Still others fall into the category of "latchkey children" who let themselves into an empty home after school each afternoon.

48.

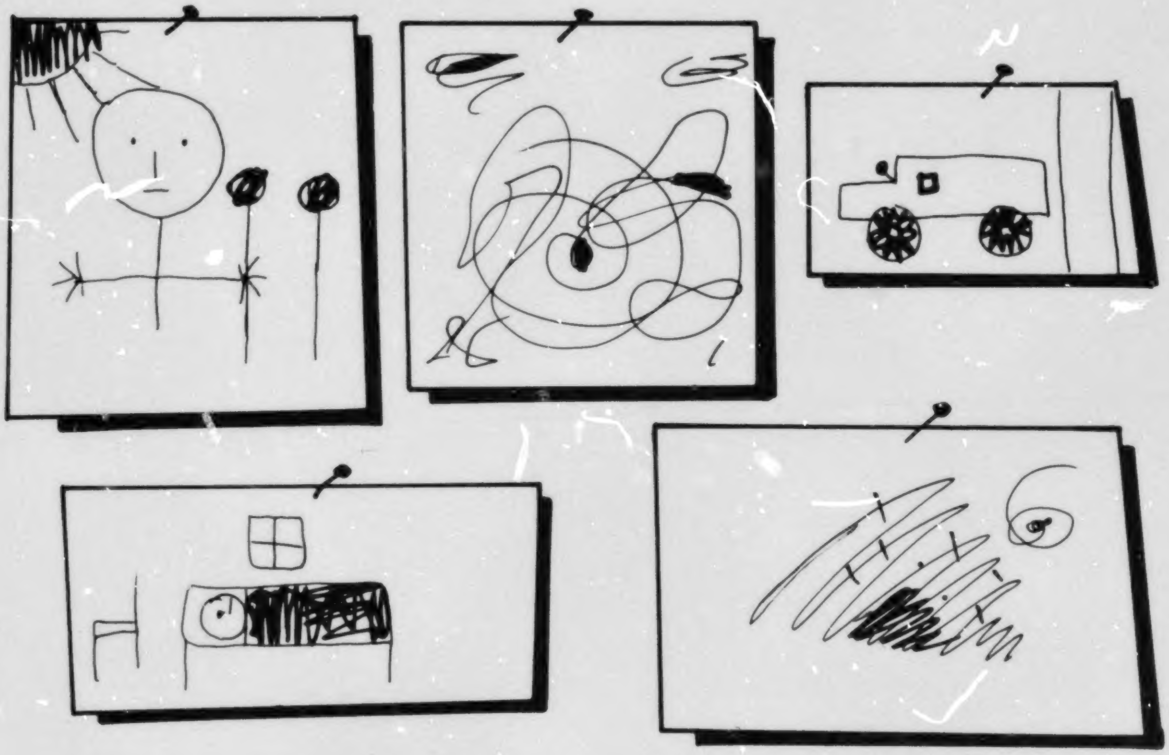
CHOOSING CHILD CARE

Directions:
Visit two or three local child care facilities. Observe to determine whether or not each child care facility fulfills the criteria below. If it does, place a check in the YES column. If it does not, place a check in the NO column.

	Facility 1		Facility 2		Facility 3	
Factors to Observe	YES	NO	YES	NO	YES	NO
PHYSICAL ENVIRONMENT						
1. Facility has an overall clean appearance.	☐	☐	☐	☐	☐	☐
2. Furniture, sinks, and toilets are at appropriate heights for children.	☐	☐	☐	☐	☐	☐
3. Temperature is comfortable.	☐	☐	☐	☐	☐	☐
4. Windows are low enough for children to see out.	☐	☐	☐	☐	☐	☐
5. An assortment of posters, pictures, and murals create colorful surroundings.	☐	☐	☐	☐	☐	☐
EQUIPMENT						
6. Toys are in good condition without rough edges or broken parts.	☐	☐	☐	☐	☐	☐
7. Toys are stored in a neat manner when not in use.	☐	☐	☐	☐	☐	☐
8. Enough materials are available for all the children to use without waiting.	☐	☐	☐	☐	☐	☐
9. Both boys and girls are allowed to play with all equipment.	☐	☐	☐	☐	☐	☐
10. A large variety of equipment is available.	☐	☐	☐	☐	☐	☐
STAFF						
11. Staff encourages parents to visit the facility at any time.	☐	☐	☐	☐	☐	☐
12. Caregivers spend quality and equivalent time with each child.	☐	☐	☐	☐	☐	☐
13. Caregivers interact with children at an appropriate level.	☐	☐	☐	☐	☐	☐
14. Regular meetings are held to inform parents of children's progress.	☐	☐	☐	☐	☐	☐
15. Caregivers are clean and neat in appearance.	☐	☐	☐	☐	☐	☐

CHOOSING CHILD CARE (CONT.)

	Facility 1		Facility 2		Facility 3	
Factors to Observe	YES	NO	YES	NO	YES	NO
SAFETY AND HEALTH						
16. Electrical outlets are covered with safety covers when not in use.	☐	☐	☐	☐	☐	☐
17. Entire facility is free of any sign of insects, rodents or other pests.	☐	☐	☐	☐	☐	☐
18. Basic first aid equipment is easily accessible.	☐	☐	☐	☐	☐	☐
19. Fire safety plans are known in detail by children and staff.	☐	☐	☐	☐	☐	☐
20. Carpets or rugs are secure to prevent tripping or slipping.	☐	☐	☐	☐	☐	☐



CHOOSING CHILD CARE (CONT.)

Directions:
Based on your visits to child care facilities in your community, decide which one you would choose for your child if you were a parent. Briefly explain why you choose a particular facility. Use the information you recorded on the chart on pages 113 and 114 to help you with your explanation.

Directions:
Compare the cost for group child care with the cost of having children cared for at home by someone who comes to your home. What are the advantages and disadvantages of home child care?

49. WILL CHILD CARE BE HARMFUL?

Directions:
Read the case study below. Then provide the information asked for following the case study.

Judy and James are a happy couple who have been married for four years. This fall, they became the parents of red-headed Scott, whom they adore. During the first few weeks following the baby's birth, Judy stayed at home and took excellent care of the baby. Now that eight weeks have passed she is talking about returning to her job as a factory supervisor. James wonders if this is best for their new son.

Pretend you are Judy and James and are trying to decide what is best for the entire family. List four arguments below to support the use of child care as an acceptable alternative and four agruments against the use of child care. Support each argument with statements about why that argument has merit.

Arguments Supporting Child Care

1.

2.

3.

4.

Arguments Against Child Care

1.

2.

3.

4.

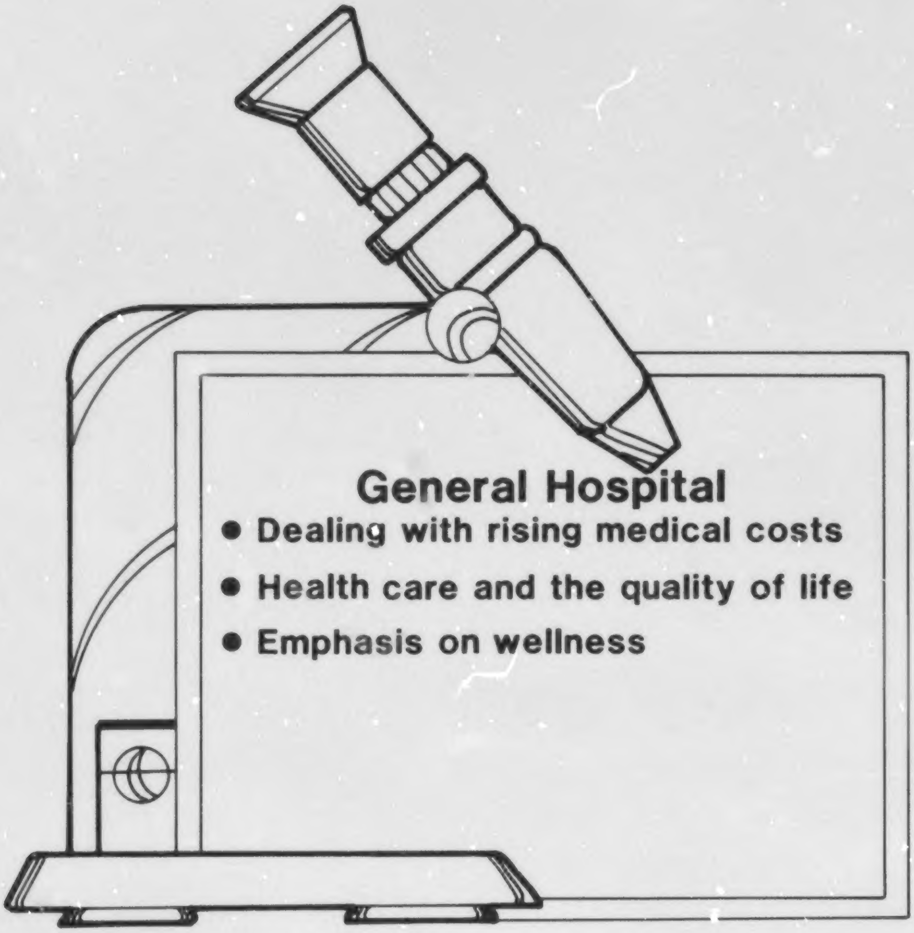
50.

INTERVIEWING PARENTS

Directions:

Interview three parents who use different child care arrangements. Interview one parent whose child is cared for by a babysitter, one whose child is cared for by a child care center, and one whose child is cared for by a relative. Fill in the chart below with information the three parents tell you about their child care arrangements.

Type of Child Care	Services provides	Costs	Advantages (3)	Disadvantages (3)
Babysitter				
Day Care Center				
Relative				



General Hospital

- Dealing with rising medical costs
- Health care and the quality of life
- Emphasis on wellness

DEALING WITH RISING MEDICAL COSTS

- The cost of visiting a doctor or spending a night in the hospital has risen drastically over the past several decades. In response to rising costs of medical care, Americans are searching for alternatives to traditional medical care.

- At-home electronic physical examinations are a trend just on the horizon. Within the next few years, it is expected that one million Americans will use computers and electronic devices to monitor their health, including diets and exercise.

- Another trend in health care is the use of non-physician health care providers. These might include nurse-practitioners, midwives, and dental hygienists who provide many routine medical services at a lower cost than licensed physicians and dentists. Some states have laws which prohibit alternative health-care providers and some states are working to remove these laws.

- Communications technology will make possible monitoring devices which allow elderly persons who are presently cared for in nursing homes to remain independent and live on their own. Increased health care knowledge and awareness will help people stay at home for health care and monitor their own progress.

- The prospects of such disasters as nuclear war, large-scale terrorism, pollution of water and air, and economic depression may add to the aspects of "preparedness" for medical care. Training in first aid and rescue techniques may be needed by the general public to aid in helping our society deal with man-made disasters.

- A new dental emergency repair kit provides what is needed to make a temporary filling or re-cement a bridge. The kit contains tools, materials, and instructions for dental work which ranges from pain relief to dealing with abscesses. The kit will save dental bill dollars since the repairs will last over a weekend and allow the person to avoid emergency costs.

- Home computers will mean that the advice of the best physicians will be available to consumers along with self-monitoring of diet, exercise, stress, and personal-wellness programs.

- The increasing number of people over the age of 65 will affect health care. Estimates say that 10 percent of the world's population in 1975 was over the age of 65, while in the year 2030, 20 percent of the population will be over the age of 65.

- One study estimates that 70 percent of all hospital space in the year 2000 will be used by those over the age of 65.

- Terminally ill patients may be able to deal better with death through hospice programs. A *hospice* is a family centered concept of supportive care for terminally ill patients and their families during the patient's illness and the following period of bereavement. In a comprehensive hospice program, services by professionals and volunteers are available in both the home and an inpatient setting on a 24-hour-a-day, 7-day-a-week basis.

- Day care may stretch to the elderly. Working people may drop off grandmother and grandfather at the local day care center for seniors and then proceed to work. In the social environment at the day care center, caregivers will provide necessary medical and physical care for seniors until they are picked up in the evening.

HEALTH CARE AND THE QUALITY OF LIFE

- A trend toward a "holistic" health movement has occurred based on the concept that the wellness of a person involves three parts—mental, physical, and spiritual.

- A study of American families in 1979 found that:
  - 36 percent exercise regularly,
  - 25 percent are trying to eat nutritionally,
  - 48 percent are cutting back on doctor visits to help fight inflation, and
  - 76 percent are confused about the government health warnings on products in the marketplace.

- Changes in values and life styles are increasing interest in diet and nutrition and in alternatives to traditional health care practices such as acupuncture, biofeedback, and yoga.

- A focus on home health care may replace much institutionalization as our society tries to deal with a larger number of elderly people and rising medical costs.

- The future of health care systems depends not only on technological advances in medicine, but also on society, human values, and economic conditions.

EMPHASIS ON WELLNESS

- Another area of possible changes in health care will be a change in emphasis from the treating of disease to the emphasis on wellness which will in turn prevent disease and extend life.

- A White House Conference held in 1981 came up with several issues in the area of wellness. This group proposed the following:
  - ☐ Government and private agencies should be urged to give out information stressing good nutrition, exercise, and an active life style.
  - ☐ To promote wellness, mental, spiritual, and physical health should be included.
  - ☐ A national health care policy to include nutritional assessments, exercise programs, and health care management for all Americans should be developed.
  - ☐ Nutrition programs, including nutrition education and special services, should be provided for the elderly, mentally retarded, pregnant, and other special populations.
  - ☐ Medicare and Medicaid payments should be made to registered dieticians who counsel these special groups on good nutrition.
  - ☐ Tax incentives should be given to companies which sponsor programs to promote and help maintain wellness.
  - ☐ Payments by insurance companies should be made for expenses related to maintaining wellness in addition to traditional payments for health care related to illness.
  - ☐ Tax incentives should be given to families who care for elderly relatives in their homes rather than place them in nursing homes.

51.

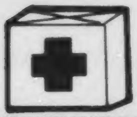
HEALTH SURVEY

Directions:
Indicate your age range, then respond to the yes/no questions below regarding your health practices and indicate your primary health concerns in the space provided.

Age ______ 13-20 ______ 21-35 ______ 36-65 ______ 66 or over

Health Practices	**Yes**	**No**
Do you feel there is too much stress in your life?	______	______
Do you take your good health for granted?	______	______
Do you feel that parents should set an example for their children in health matters?	______	______
Have you made any changes in your life style in the interest of good health?	______	______
Do you maintain your ideal weight?	______	______
Do you exercise regularly?	______	______
Are you eating more nutritionally than in the past?	______	______
Do you eat a variety of food (milk and milk products, meat and legumes, vegetables and fruits, breads and cereals)?	______	______
Do you try to avoid too much fat in your diet?	______	______
Do you try to eat foods with adequate starch and fiber?	______	______
Do you try to avoid too much sugar in your diet?	______	______
Do you try to avoid too much sodium in your diet?	______	______
If you choose to drink, do you do so in moderation (no more than two drinks per day)?	______	______
Do you smoke?	______	______
Do you drink coffee, tea, or caffeinated soft drinks?	______	______
Do you have confidence in your doctor(s)?	______	______
Do you visit your dentist regularly?	______	______
Do you feel confused by government health warnings?	______	______
Do you feel well-informed about health practices?	______	______
Have you cut back on health practices as a result of inflation?	______	______
Do you feel you should have a periodic health checkup whether or not anything bothers you?	______	______
Do you feel that health checkups cost too much for the average family?	______	______
Do you feel that doctors' fees have risen more than other things?	______	______

What are your primary health concerns?



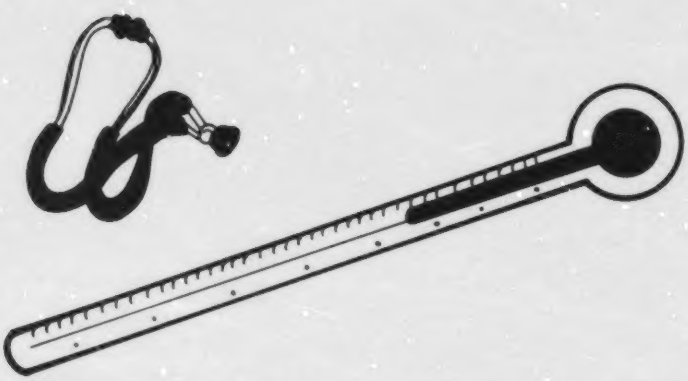
52.

TAKING CARE OF YOURSELF

Directions:

Visit or call three pharmacies and medical supply businesses to find out what types of home health care aids have increased most in popularity in the past few years. (Examples: blood pressure kits, new types of thermometers, dental repair kits, etc.) Ask the people you talk to to give their opinions about reasons for an increase in sales of these items. Record your findings in the spaces provided below.

Home Health Care Aid Increasing in Popularity	Reason for Increased Popularity



53.

DO-IT-YOURSELF HEALTH CARE

Directions:

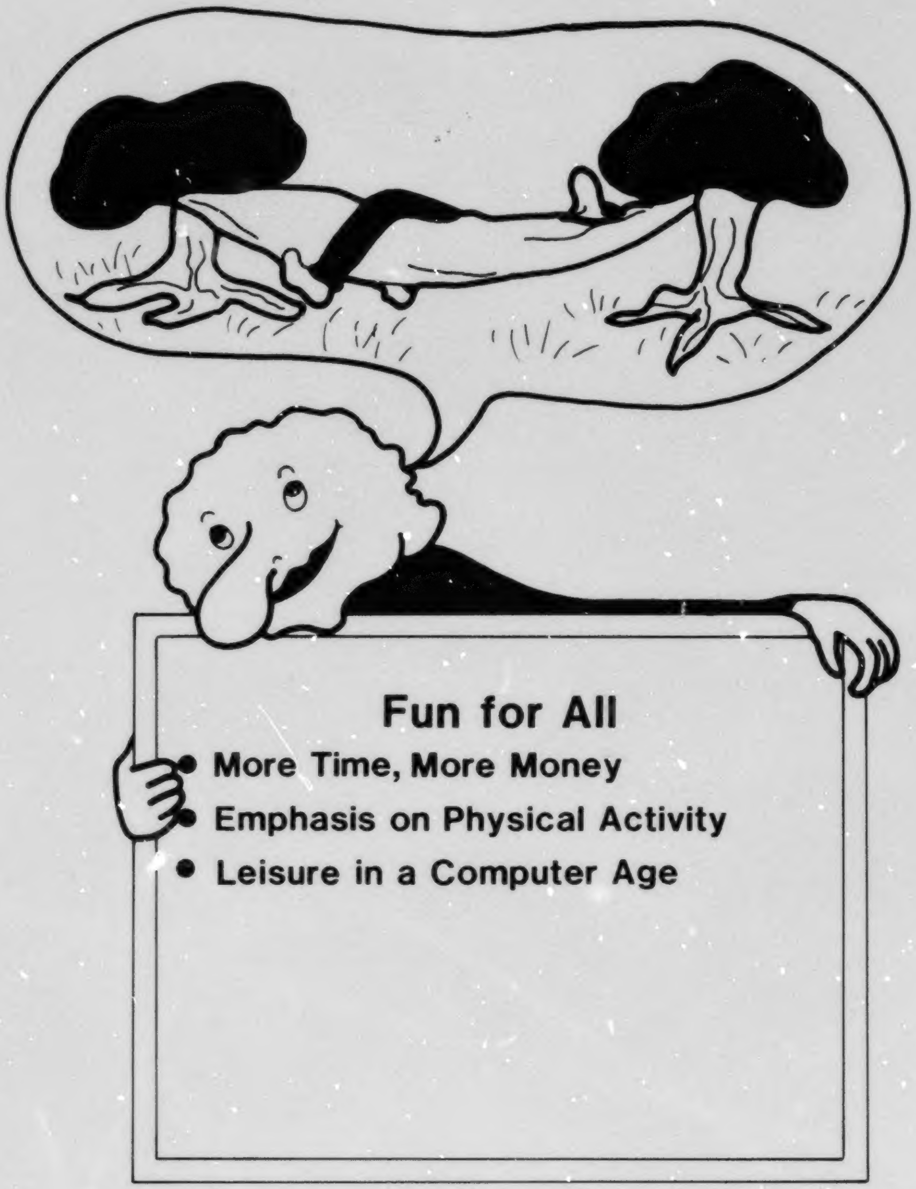
Interview three adults you know to find out if their families have increased home health care of family members in the past five years. (Examples: blood pressure monitoring, pregnancy testing, temporary dental repairs.) List below the types of home health care mentioned by the three adults you interview.

Also ask these persons about changes in the health care received by family members in the last five years. (Examples: increased cost, shorter hospital stays, more out-patient services.) List below the types of medical care mentioned by the three adults you interview.

Directions:

Compare your findings with those of other students in your class. Complete the chart below to show the most obvious changes occurring in family health care.

Changes in Home Health Care	Changes in Professional Health Care



Fun for All

- More Time, More Money
- Emphasis on Physical Activity
- Leisure in a Computer Age

MORE TIME, MORE MONEY

- Americans play more and work less than ever before. Less time is spent on jobs and housework. Vacations are longer. More holidays are scheduled to fall on Mondays. Americans are making better use of time off from work. Also, people are living longer, are healthier, and are retiring earlier. The lines between work and leisure may begin to disappear as Americans discover ways to combine the two.

- The health benefits of play and recreation have become more important as less physical exertion is required at home and on the job.

- The role of play and recreation in mental health is being given more attention. Scientists have found that satisfaction with leisure is an important factor in an individual's satisfaction with life and may even affect one's intelligence.

- The home will be the focal point of leisure activities in the foreseeable future, leading some experts to fear that people will become "electronic moles, burrowing into their media rooms." With increasing amounts of leisure time, however, people may be anxious to get out of the house and be with other people.

- Factors which have increased the amount of money spent for leisure include more free time, increased mobility, a rise in discretionary income, and greater ecological and fitness awareness.

- Americans are spending much more money on leisure activities than in the past. According to a study by the National Recreation and Park Association, leisure expenditures rose from $58 billion in 1965 to $244 billion in 1981. Even taking inflation into account, that is a 47 percent increase.

- Travel costs have gone up a lot more than other things. The car is still the most popular means of vacation travel. Flying is the quickest way to get where you are going, but the most difficult for estimating costs. A rented recreational vehicle is the most expensive way to travel. The effects of future fuel costs and shortages on each of these means of travel is yet to be seen.

EMPHASIS ON PHYSICAL ACTIVITY

- In their search for leisure time activities, Americans have rediscovered simpler forms of entertainment and recreation that emphasize physical activity, simple equipment, and less competition.

- The number of Americans who take part in some form of physical exercise every day has doubled since 1961 according to a 1978 Gallup poll. Almost half of all Americans exercise regularly.

- Interest in self improvement has popularized body-building, self-defense, walking, running, and jogging. Competitive offshoots of these activities, like marathons, draw increasing numbers of participants and spectators.

- The increased popularity of wilderness sports such as backpacking, hiking, white water canoeing and rafting, and cross-country skiing has made trail space and camping spots scarce in many areas.

- The traditional division between "men's" and "women's" sports is breaking down—especially for youth. Men and women are competing against one another in shooting, horse racing and other equestrian events, auto racing, and tennis.

- New materials and designs in sports equipment are making sports safer than ever before and making sports participation easier for women, the elderly, and the handicapped.

- Sports originating in other countries, such as soccer, are becoming more popular in the United States while traditional American sports, like basketball, baseball, and football, are gaining ground in many other countries.

- Space sports may provide new avenues for future recreation. The possibilities are limitless.

- Motor-powered recreational equipment—outboard motorboats, motorcycles, snowmobiles, and four-wheel-drive vehicles—have become enormously popular in a very short time. The soaring cost of fuel may curtail motorized recreation in the future, but this result is far from certain.

- Foot-powered recreational activities are even more popular than motorized ones. The fastest growing winter sport is cross-country skiing. Picnicking, sightseeing, swimming, walking, jogging, and playing outdoor games are all popular foot-powered activities.

- The number of magazines devoted to various sports and leisure activities has multiplied unbelievably in recent years.

LEISURE IN A COMPUTER AGE

- Instead of being printed on paper, magazines, newspapers, and books of the future will be available to the home computer user from electronic libraries in a matter of seconds. News may be distributed electronically allowing people to choose the stories that interest them. References and how-to manuals will also be available on videodiscs that can be viewed at home.

- Books for pleasure reading may be available on microchips that can be used in a portable book-size reading machine which automatically "turns" the pages as you read.

- Fewer Americans are attending movies than at any time since 1941. Nationally, in 1941, 36 percent of the population 13 and older had attended a movie during the preceding week. In 1981, the figure was 12 percent. A larger proportion of movie goers are in their teens and twenties than previously, but even 17- and 18-year-olds are seeing fewer movies in movie theaters than in 1941.

- Future movies, like the Walt Disney film "Tron," will feature wild, abstract images in constant motion created by computer graphics.

- Movies may be projected on a 360-degree screen that makes members of the audience feel as if they are part of the picture. Members of the audience may be able to "vote" to select the direction of the movie plot by pressing buttons on their chairs.

- Tomorrow's artists will use the sky as a canvas for laser-generated art.

- The computer will play an increasing role in composing and generating music to enjoy.

- Computers will be able to alter our moods with visual images and colors rather than words and sentences.

- Computerized games and simulations have caught the interest of persons of all ages, including nursing home residents, seeking less active recreation.

- Game arcades, though declining some in popularity, have increasingly sophisticated visual and sound effects. Arcade games are likely to become so realistic that they can produce "real" sights, sounds, and physical sensations. Computer-controlled graphics will simulate high-speed auto racing, piloting a jet plane, landing a space craft on the moon, or operating battlefield weapons.

- Home versions of arcade games will continue to increase in popularity as home computer use becomes more widespread.

- Home video games now simulate popular card and board games and most active sports, as well as ground and space battles. Who knows what may come tomorrow?

- Sales of traditional audiovisual media—TV sets, radios, records, audio equipment, and movies—have fallen severely as a result of Americans' new spending patterns in purchasing media products and services.

- In the past few years, American consumers have increasingly spent their media dollars on the new electronic media—cable and pay TV, videocassette recorders, videogames, video movies, and home computers.

- The introduction of two-way cable TV may permit home viewers to vote electronically on controversial game plays in sporting events with the majority vote being decisive.

- The family media room of the future may include a voice-activated computer that controls the home entertainment center. A simple command may be all that is necessary to surround yourself with the sights and sounds of the ocean, a jungle, a symphony orchestra, a broadway play, your favorite singer, or a ball field.

54. ALL IN FUN

Directions:
Using the chart below, interview three adults about their leisure time activities. Record their responses in the spaces provided.

	Number of hours you spend each week on:			Your Leisure and Recreational Activities
	Jobs	Housework	Leisure	
Person 1				
Person 2				
Person 3				

55.

WAYS TO UNWIND

Directions:

Tally the leisure and recreational activities you and your classmates recorded in the last column of the chart on the previous page. In the chart below, list these activities in order of frequency, listing from most frequently named to least frequently named. Then classify each activity by placing checks (✓) in the appropriate columns.

Activities	Physical	Non-physical	Competitive	Non-competitive	Motor-powered	Foot-powered	Expensive	Moderate in Cost	Inexpensive	To Do at Home	To Do Away from Home

56. MEDIA BLITZ

Directions:
Poll five people of various ages about their use of media. Indicate the age and sex of the persons you interview and check (✓) YES or NO to record their responses to the questions below.

	Person 1 Age __ Sex __		Person 2 Age __ Sex __		Person 3 Age __ Sex __		Person 4 Age __ Sex __		Person 5 Age __ Sex __	
Questions	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO
In the past week have you:										
listened to a radio?										
listened to a record or tape?										
watched network TV?										
watched cable TV?										
watched pay TV?										
seen a movie at a theater?										
watched a video movie at home?										
played a game at an arcade?										
played a home computer game?										

Directions:
Tally the responses received by you and your classmates. List the types of media from most popular to least popular below. How do your findings compare with the information presented in this unit?

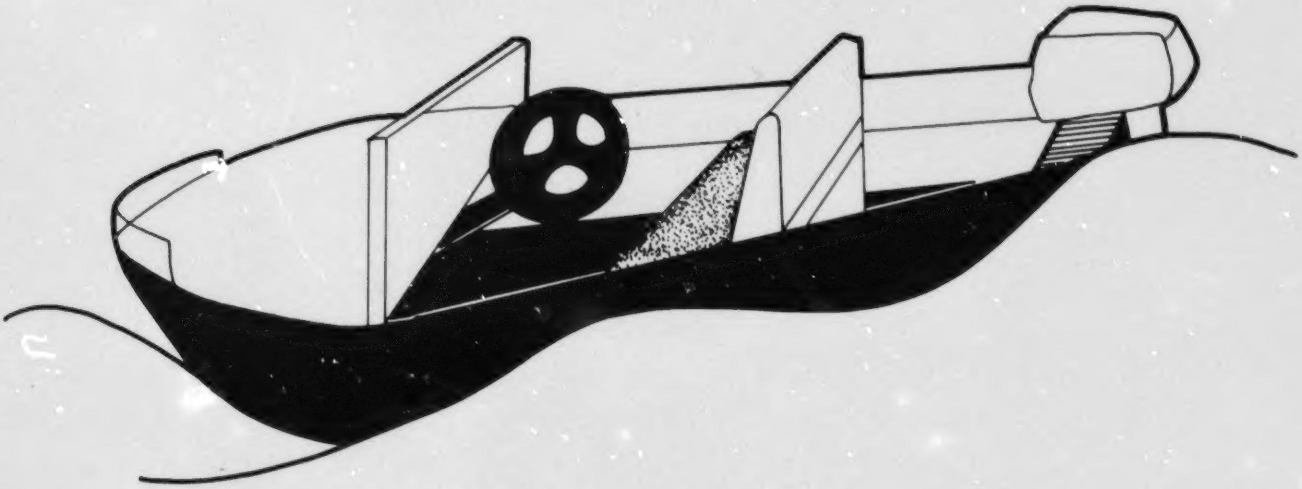
57.

THE HIGH COST OF LEISURE

Directions:
Keep a record of the money you spend on leisure and recreation for one week. Record your expenses in the space below.

Day	Leisure or Recreation Activity	Amount Spent

Directions:
Analyze your expenses. Did you spend more than expected? less than expected? What might you do differently in the future?



58.

LEISURE-- HOW MUCH WILL IT COST?

Directions:
Choose a leisure or recreation activity you might be interested in pursuing. Investigate the cost of the activity by completing the exercises below.

1. Write the name of the leisure or recreation activity you are interested in pursuing. ____________

____

2. Read a book or visit a retail store to identify the basic equipment and supplies you would need for the activity. List the equipment and supplies and their cost below.

Equipment/Supplies	Cost

3. Identify other items (such as classes, licenses, or fees) necessary to pursue the activity. List the cost for each item.

Item	Cost

LEISURE--
HOW MUCH
WILL IT COST? (CONT.)

4. Visit a person who is already pursuing the activity. Ask the person the following questions and record his or her answers.

Question	Answer
a. What additional equipment/supplies have you purchased?	
b. How much do you spend each week on this activity?	
c. How much do you spend annually on this activity?	

5. Based on your investigation, how does information about the cost of the leisure or recreation activity affect your continued interest in pursuing the activity?

___

___

___

59.

INVENT A GAME

Directions:
Invent a game or recreational activity which requires physical activity (but not unusual physical skill or risk of serious injury), simple homemade equipment or no equipment, and involves cooperation rather than competition. Write below the name and description of the game or activity, equipment needed, and procedures or rules. Share your game or activity with the class.

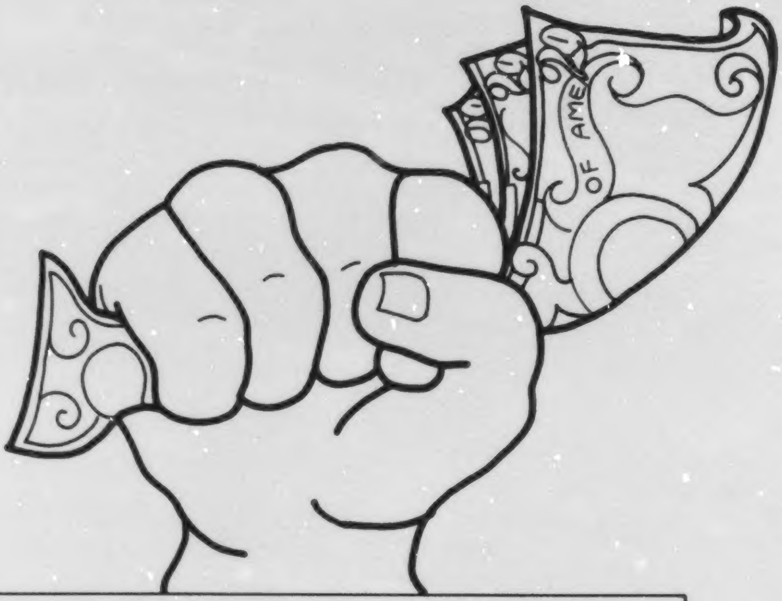
Game or Activity:

Description:

Equipment Needed:

Procedures or Rules:

Suggested Readings: Fluegelman, Andrew (ed.) *The New Games Book*. New York: Doubleday, 1976.
Fluegelman, Andrew (ed.) *More New Games and Playful Ideas*. New York: Doubleday, 1981.



YOU - the Consumer in Control

- Using your energy to save money
- Adapting to change in the marketplace

USING YOUR ENERGY TO SAVE MONEY

- Consumers of the future will value goods and services produced in the home more than consumers of the 60's and 70's valued such goods and services. More and more people are becoming conservation conscious and more are opting for a life style of voluntary simplicity.

Value of Household Work

- Household work can be defined as the nonpaid productive activities performed for the benefit of the family or household. Most household work is still done by women. Other family members may help, but the wife and mother, even when she is a wage earner outside the home, is generally responsible for the operation of the household. However, there is some change in attitude and in some cases in practices regarding who should perform household tasks.

- Because the services and products of household work are not sold, their value was not recognized until recently. Although the value of household activities is difficult to evaluate, the resulting goods and services would have to be purchased if they were not provided by family members.

- The economic value of unpaid production is excluded from the Gross National Product (GNP). This includes the contributions of volunteers in many agencies and groups. It also includes household work such as repair and maintenance, meal preparation, cleaning, and chauffeuring. Because the value of the goods and services produced outside the market system is excluded, some people feel that the value of total economic production in the United States is underestimated. The value of unpaid productive work has been estimated as equal to 35 percent of the GNP. In 1978, this would have been over $7000 billion—a sizable omission.

- Determining the value of household work has several benefits. In the case of a divorce, wrongful death, or disability, determining the future worth of the person's household work is increasingly used by the courts in determining the size of settlements. The chart below shows the average dollar value of household work in one recent study.

AVERAGE ANNUAL DOLLAR VALUE OF HOUSEWORK DONE BY WIVES AND HUSBANDS[1]

Children	Age	Employed Wife		Nonemployed Wife	
	Wife	Wife	Husband	Wife	Husband
0	under 25	$ 4,700	$ 1,800	$ 7,000	$ 1,100
	25-39	5,000	1,900	8,000	1,600
	40-54	5,900	1,100	8,400	2,100
	55 and over	6,000	1,500	7,400	2,700
	Youngest child	Wife	Husband	Wife	Husband
1	12-17	$ 6,700	$ 2,400	$ 9,600	$ 2,700
	6-11	8,000	1,500	9,400	2,000
	2-5	6,200	2,000	9,100	2,400
	1	8,300	600	9,900	2,300
	under 1	(information unavailable)		10,900	2,100
2	12-17	$ 6,300	$ 2,100	$10,000	$ 2,200
	6-11	7,200	2,000	9,900	2,100
	2-5	8,300	2,400	11,000	2,200
	1	8,400	5,000	11,700	2,200
	under 1	10,200	2,100	12,600	2,000
3	12-17	$ 5,000	$ 2,100	$ 9,000	$ 1,400
	6-11	8,600	2,000	9,900	2,200
	2-5	10,200	2,800	10,700	1,900
	1	11,500	3,200	11,600	2,200
	under 1	8,700	2,800	13,300	2,000

---

[1] From Bulletin 60, New York State College of Human Ecology, Cornell University, Ithaca, NY, Revised 1980.

- In the future the economic value of household work may be used as a basis for participation in the Federal Social Security system.

- Payment for household work has been proposed as a way to provide greater equity between the sexes, add dignity to the work, increase satisfaction of working full-time at home, and to clarify the costs of women's time on the job and in the home. In addition, considering the value of non-paid productive services would allow more accurate measurement of the nation's economic output.

- Unpaid household work done by family members can add to the level of living enjoyed by the family without an increase in income. To give a simplified example, calculate the cost of serving a meal to a family at home and the cost of serving that same meal to the same family in a restaurant.

- Time spent in one activity is not available to spend in another. For example, if five hours are used for household production, those hours are not available for earning income from a job. Families should carefully weigh the value of their members' time in household production and job activities before deciding where the time is best spent.

Conservation

- With only six percent of the world's population but over 30 percent of the world's energy use, the amount of energy used in the United States is double the amount used in most European countries. About one-third of the energy in this country is consumed by families for home and automobile use.

- Following the energy shortage in 1973, one survey of families in the United States indicated that more than half had reduced their energy consumption at least "somewhat" below the previous year's level. Less than one person in five reported no conservation at all.

Home Production

- Home production may increase by an appreciable amount the total income of many families, particularly during a period of inflation or depression. Household production enables a family to consume more goods and services than their income would otherwise permit. In other words, it increases the real income of the family.

- The amount of household production of goods and services has varied over time. Some experts feel that more and more household tasks will be performed by paid non-household members. This would create new work in the job market, work which is now done in the home without money changing hands. More two-paycheck families would result. Other experts, like Alvin Toffler, feel that household production will increase.

- The stage in the family life cycle influences how much time is spent in household production by families. The number of children, age of children, and employment status of parents are most closely related to time used for household tasks. Age, education, and income also influence the amount of time spent on household production activities by family members.

Prosumption

- Americans are becoming increasingly self-reliant. Many people are doing tasks for themselves that they once depended on others to do for them. They are checking their own blood pressure, treating their own minor illnesses, pumping their own gas, joining self-help groups, and doing many other things for themselves.

- Alvin Toffler in *The Third Wave* described this trend as "the rise of the prosumer." Toffler used the term *prosumer* to describe persons who produce goods and services for their own consumption. They are both *producers* and *consumers* of many of the goods and services they need.

Voluntary Simplicity

- What do people who plant a garden, repair their own car, hang their own wallpaper, or change jobs to be home more hours have in common? They may be trying to simplify their life styles. The term used to describe this effort to lead a simpler life is *voluntary simplicity*.

- Voluntary simplicity was practiced as a life style by such well-known figures as Ghandi in India and Thoreau in Massachusetts.

This life style today involves living in a way that has been described as "outwardly simple but inwardly rich."

- People who practice voluntary simplicity are concerned with making their lives simpler. They cooperate with one another to achieve a more fulfilling existence. Voluntary simplicity involves consuming less, being concerned with the environment, and wanting to live and work in a smaller economy while enjoying things to their fullest. People can practice voluntary simplicity in varying degrees. They can incorporate the concept into their current life style and income level according to their individual needs.

- A variety of behaviors are associated with the practice of voluntary simplicity. Typical behaviors might include recycling of goods, home production of food and services, sharing of scarce or expensive items, and cooperation in discovering creative solutions to common problems. Walking or riding a bicycle instead of using a car is one way to practice voluntary simplicity. Making clothes for yourself and family, creating decorative accessories for your home, building furniture, repairing or remodeling a home, planting a garden or replacing a water pump on your car are other ways to practice voluntary simplicity.

- Voluntary simplicity can also be practiced community wide through campaigns to collect and recycle aluminum or paper or through installation of water purification systems.

Keeping a Tight Rein on Finances

- If you were given $100, would you choose to save it or spend it? This is a question which consumers face regularly with the money they receive. Making that decision may be deeply rooted in your value system. How and when people save is a very personal decision.

- For a number of years Americans have saved very little. Less than five percent of all the money that Americans earn is saved. What causes this lack of savings is not quite clear. Some people say that it is because there is nothing left to save because of the high cost of living. Still others say that it is not worth saving money since the dollar you save today may only be worth eighty-five cents when you spend it in a year. Still others claim that Americans have lost the ethic to save.

ADAPTING TO CHANGE IN THE MARKETPLACE

- Changes are always taking place in the marketplace. Two marketplace trends that are likely to expand are electronic fund transfers and the use of "no-frills" stores and products.

Electronic Fund Transfers

- Electronic fund transfers are changing the way people bank. Electronic fund transfers (EFTs) are ways to make economic exchanges by using computers. Computers may be used completely or partially for completing transactions. Banks favor the use of electronic fund transfers because they reduce the amount of paperwork. The reduction in paperwork results in savings for banks. People can use electronic fund transfers in place of checks. When EFTs are used in this way, banks can save a great deal of money because processing checks is costly.

- Electronic fund transfers can be used in several other ways. Funds can be automatically transferred from one account to another. Bills can be automatically paid each month. When automatic teller machines (ATMs) are used to make deposits, make payments on loans, and to get a current reading on one's balance, electronic fund transfers are being made.

- The development of electronic fund transfers brought about many banking changes. Banking hours are no longer from eight to five. Deposits can be made and cash can be withdrawn from one's account 24 hours a day wherever appropriate automatic transfer machines are located. Goods and services can be paid for by using a debit card at a point of sale (POS) terminal located in a store or business. The way people bank has changed and will continue to change as the use of EFTs becomes more widespread.

- Many families use EFTs to pay a portion of their bills by telephone. The Touch Tone telephone can transmit data that will cause money to be transferred from an individual's bank account to the bank account of a creditor. Other families make use of electronic fund transfers to have paychecks or Social Security checks automatically deposited into bank accounts or to pay fixed monthly bills. Other banking services are potentially available using home computers to access checking account information, review statements, and carry out banking transactions.

No-Frills Stores and Products

- Closely related to the trends toward increased household production, voluntary simplicity, and prosumption is the growing popularity of "barebones" stores and products. No-frills grocery stores eliminate many of the usual services. Customers select products from their packing cartons and bag their own groceries. Sales are sometimes "Cash Only." In the "warehouse" grocery store, prices for national brands are usually 15-20 percent lower than in conventional stores. Other types of self-service stores are increasing in popularity—shoe stores, clothing stores, variety stores, and home building product stores. Self-service gasoline stations greatly increased in popularity following the 1973 gasoline crisis.

- Along with the increasing patronage of the no-frills stores, there has been an increase in the use of generic (no-brand) food and drug products. Industry estimates indicate that generic products account for between 5 and 15 percent of grocery sales.

- A survey conducted by Better Homes and Gardens Magazine of 430 consumers who have tried generic products showed that 26.5 percent still buy all the generic items that they have tried, 19.6 percent are no longer buying any generic item, and 47.5 percent continue to buy some of the items they have tried. Of those consumers buying generic products, 35.8 percent had incomes of over $25,000 per year and 21 percent had incomes from $20,000 to $24,999 per year.

60.

CURRENT VALUE OF HOUSEHOLD WORK

Directions:

In the chart below, put an X in the boxes by household tasks performed by members of your family. Estimate the number of hours per week spent by each family member performing each task listed. Using newspaper want ads and information from employment agencies, estimate the value of the household work performed by each member of your family. Find the total replacement cost of work performed in a week and in a year. NOTE: Replacement cost is the amount of money required to hire a job done rather than have it done by a family member.

	FAMILY MEMBERS											
	________			________			________			________		
TASKS	Hours per Week	Value per Hour	Total Value	Hours per Week	Value per Hour	Total Value	Hours per Week	Value per Hour	Total Value	Hours per Week	Value per Hour	Total Value
☐ Food Buying	______ x	$______ =	$______	______ x	$______ =	$______	______ x	$______ =	$______	______ x	$______ =	$______
☐ Nursing	______ x	$______ =	$______	______ x	$______ =	$______	______ x	$______ =	$______	______ x	$______ =	$______
☐ Tutoring	______ x	$______ =	$______	______ x	$______ =	$______	______ x	$______ =	$______	______ x	$______ =	$______
☐ Waitressing	______ x	$______ =	$______	______ x	$______ =	$______	______ x	$______ =	$______	______ x	$______ =	$______
☐ Sewing	______ x	$______ =	$______	______ x	$______ =	$______	______ x	$______ =	$______	______ x	$______ =	$______
☐ Laundering	______ x	$______ =	$______	______ x	$______ =	$______	______ x	$______ =	$______	______ x	$______ =	$______
☐ Chauffeuring	______ x	$______ =	$______	______ x	$______ =	$______	______ x	$______ =	$______	______ x	$______ =	$______
☐ Gardening	______ x	$______ =	$______	______ x	$______ =	$______	______ x	$______ =	$______	______ x	$______ =	$______

CURRENT VALUE OF HOUSEHOLD WORK (CONT.)

FAMILY MEMBERS

________ ________ ________ ________

TASKS	Hours per Week	Value per Hour	Total Value	Hours per Week	Value per Hour	Total Value	Hours per Week	Value per Hour	Total Value	Hours per Week	Value per Hour	Total Value
☐ Counseling	___ x	$___ =	$___	___ x	$___ =	$___	___ x	$___ =	$___	___ x	$___ =	$___
☐ Home Maintenance	___ x	$___ =	$___	___ x	$___ =	$___	___ x	$___ =	$___	___ x	$___ =	$___
☐ Child Care	___ x	$___ =	$___	___ x	$___ =	$___	___ x	$___ =	$___	___ x	$___ =	$___
☐ Cleaning	___ x	$___ =	$___	___ x	$___ =	$___	___ x	$___ =	$___	___ x	$___ =	$___
☐ Planning Meals	___ x	$___ =	$___	___ x	$___ =	$___	___ x	$___ =	$___	___ x	$___ =	$___
☐ Cooking	___ x	$___ =	$___	___ x	$___ =	$___	___ x	$___ =	$___	___ x	$___ =	$___
☐ Washing Dishes	___ x	$___ =	$___	___ x	$___ =	$___	___ x	$___ =	$___	___ x	$___ =	$___
☐ Entertaining	___ x	$___ =	$___	___ x	$___ =	$___	___ x	$___ =	$___	___ x	$___ =	$___
☐ Running Errands	___ x	$___ =	$___	___ x	$___ =	$___	___ x	$___ =	$___	___ x	$___ =	$___
☐ Corresponding	___ x	$___ =	$___	___ x	$___ =	$___	___ x	$___ =	$___	___ x	$___ =	$___
☐ Bookkeeping/ Managing	___ x	$___ =	$___	___ x	$___ =	$___	___ x	$___ =	$___	___ x	$___ =	$___

CURRENT VALUE OF HOUSEHOLD WORK (CONT.)

FAMILY MEMBERS

	____			____			____			____		
TASKS	**Hours per Week**	**Value per Hour**	**Total Value**	**Hours per Week**	**Value per Hour**	**Total Value**	**Hours per Week**	**Value per Hour**	**Total Value**	**Hours per Week**	**Value per Hour**	**Total Value**
☐ Budgeting	____ x	$____ =	$____	____ x	$____ =	$____	____ x	$____ =	$____	____ x	$____ =	$____
☐ Decorating	____ x	$____ =	$____	____ x	$____ =	$____	____ x	$____ =	$____	____ x	$____ =	$____
☐ Shopping	____ x	$____ =	$____	____ x	$____ =	$____	____ x	$____ =	$____	____ x	$____ =	$____
☐ Lawn Care	____ x	$____ =	$____	____ x	$____ =	$____	____ x	$____ =	$____	____ x	$____ =	$____
☐ Car Maintenance/Repair	____ x	$____ =	$____	____ x	$____ =	$____	____ x	$____ =	$____	____ x	$____ =	$____
☐ Carpentry	____ x	$____ =	$____	____ x	$____ =	$____	____ x	$____ =	$____	____ x	$____ =	$____
☐ Plumbing	____ x	$____ =	$____	____ x	$____ =	$____	____ x	$____ =	$____	____ x	$____ =	$____
WEEK'S TOTAL	____ hrs.		$____	____ hrs.		$____	____ hrs.		$____	____ hrs.		$____
x 52 =		x 52			x 52			x 52			x 52	
YEAR'S TOTAL	____ hrs.		$____	____ hrs.		$____	____ hrs.		$____	____ hrs.		$____

61.

POLLUTION IN YOUR ENVIRONMENT

Directions:
In the space provided, list two of your family's activities that add to pollution. Explain how these activities affect the environment and how you can help reduce these forms of pollution.

1.

2.

Directions:
In the space provided below, list two industries in or near your community that contribute to pollution. Explain how pollution from these industries affects the environment. Explain what has been done and/or what is being done to reduce pollution from these industries.

1.

2.

62.

SIMPLIFY YOUR LIFE STYLE (WORD SCRAMBLE)

Directions:
Unscramble the words below to reveal eight words associated with voluntary simplicity. Write the unscrambled words on the blanks provided. The first letter of each word is circled.

1. LCOOYGⒺ ____________________
2. FEYR-TⒹ-OOISLU ____________________
3. LEIPMⓈ ____________________
4. TAPOⒸIROONE ____________________
5. RⒺMENTIVNON ____________________
6. TOLARUNⓋY ____________________
7. ⒻENTULLMILF ____________________
8. JⒺNYOMTEN ____________________

63.

FOOD FOR THOUGHT

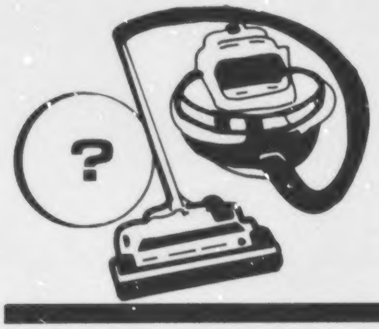
Directions:
Write a short paragraph answering each of the following questions.

1. How can homemaking be given greater value in our society?

2. What is a fair division of household tasks if the husband and wife both work equal hours outside the home?

3. How can work be fairly divided between parent and child(ren) in a single parent family?

4. What guidelines could be used to determine which member of the household should do which task?



64.

ATTITUDES TOWARD HOMEMAKING

Directions:
Interview six persons, three male and three female, regarding their attitudes toward homemaking. Ask each person the question, "How do you feel about homemaking tasks?" Record their answers in the spaces below.

Person 1 (Male) ______________________________

Person 2 (Male) ______________________________

Person 3 (Male) ______________________________

Person 4 (Female) ______________________________

Person 5 (Female) ______________________________

Person 6 (Female) ______________________________

Were the overall attitudes toward homemaking positive or negative? ______________

Were there any differences in attitudes of males and females? __________ Explain __________

Were there any differences in attitudes of persons who work full-time and those who do not? _____

Explain ______________________________

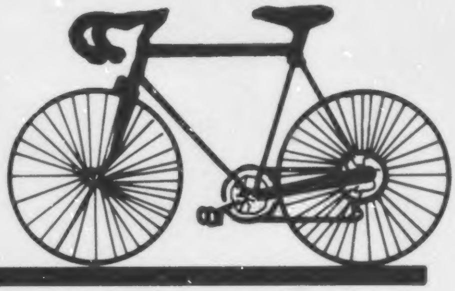
If you found differences in attitudes, what effect do you feel those attitudes are likely to have on the division of household tasks? ______________________________

65.

KEEP IT SIMPLE

Directions:
Listed below are various activities people can do to live a life style of "voluntary simplicity." Read each activity. Place a check (✓) in the first column if you and/or your family are now doing the activity listed. Place an X in the second column if you think you and/or your family would be willing to do the activity.

Now Doing	Willing To Do	Activity
______	______	1. Keep the thermostat no higher than 68° F. in the winter.
______	______	2. Insulate your home (insulation, storm windows, etc.).
______	______	3. Save water.
______	______	4. Make home repairs.
______	______	5. Consume less meat.
______	______	6. Preserve food.
______	______	7. Grow vegetables.
______	______	8. Use natural pesticides.
______	______	9. Avoid disposable paper products.
______	______	10. Ban the non-returnable.
______	______	11. Make clothing.
______	______	12. Mend and reuse garments.
______	______	13. Decorate the home simply.
______	______	14. Exercise without equipment.
______	______	15. Do not abuse drugs.
______	______	16. Watch weight.
______	______	17. Ride a bicycle.
______	______	18. Avoid unnecessary auto travel.
______	______	19. Refurbish an old home.
______	______	20. Fight environmental pollution.



66.

VOLUNTARY SIMPLICITY AND YOU

Directions:
Refer back to the activity you just completed, "Keep It Simple," to answer the following questions.

1. Choose two activities you and/or your family now do to simplify your lives. Briefly answer the questions below.

Activity
Why did you and/or your family start doing this? ____________________

How has this activity helped you and/or your family simplify your lives? ____________________

Activity
Why did you and/or your family start doing this? ____________________

How has this activity helped you and/or your family simplify your lives? ____________________

2. Identify two activities you and/or your family would be willing to do to simplify your lives. Briefly answer the questions below.

Activity
What changes in your life style would you and/or your family have to make to implement this activity?

____

Why did you choose this activity? ____________________

VOLUNTARY SIMPLICITY AND YOU (CONT.)

Activity

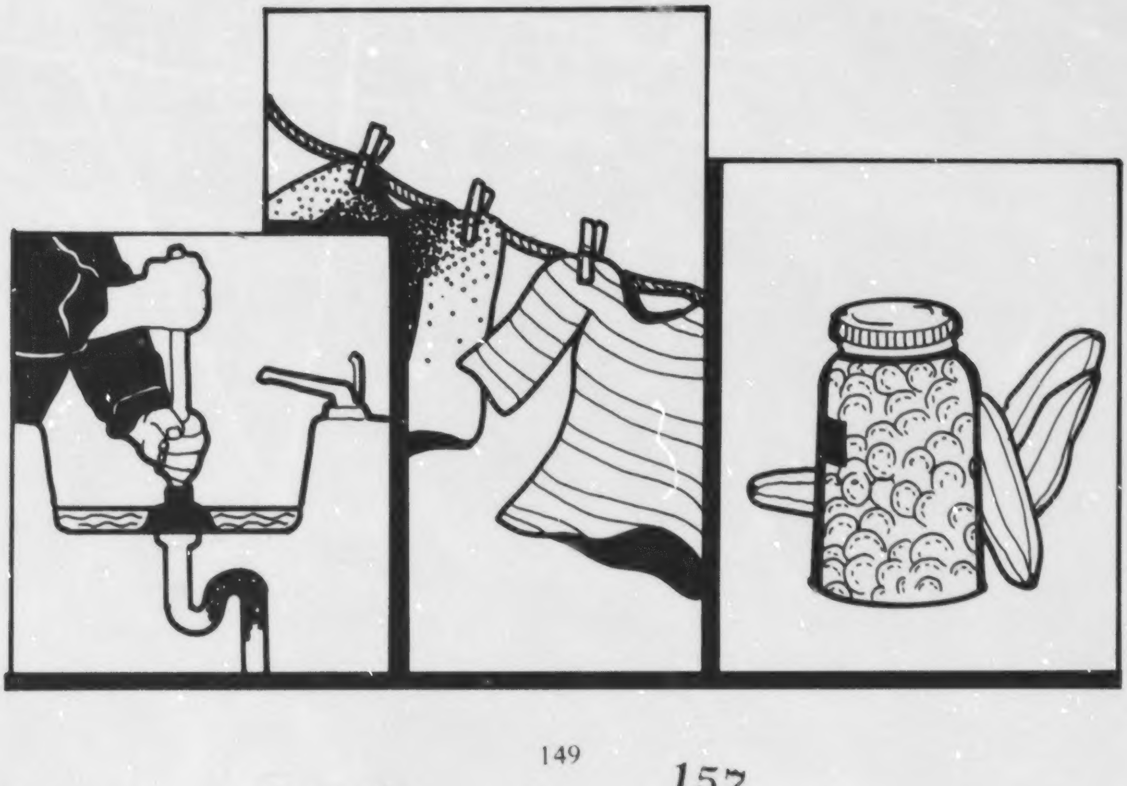
What changes in your life style would you and/or your family have to make to implement this activity?

____

____

Why did you choose this activity? ______________________________

____



67.

WHAT'S YOUR EFT IQ?

Directions:
Match the terms in the right column with the descriptions of electronic fund transfers (EFTs) in the left column. Place the letter of the term in the blank to the left of the description. No term will be used more than once.

Description

_____1. Charges against the card are deducted from the person's account immediately

_____2. Employer has salary for employees delivered electronically from employer's institution to employee's institution

_____3. Institution pays certain bills when the individual authorizes this by phone

_____4. Benefits are electronically delivered from the government to the financial institution of the consumer's choice

_____5. Person authorizes bank to transfer a specific amount of money from checking to savings account each month

_____6. Consumer authorizes the financial institution to automatically pay certain bills

_____7. May be found at many locations to make banking easier

_____8. Terminals will accept debit cards to pay for goods and services

Terms

A. Automatic teller machines (ATM)

B. Automatic fund transfer

C. Automatic payment of bills

D. Debit card

E. Direct deposit of social security benefits

F. Direct deposit of pay

G. Point of sale (POS) terminals

H. Paying by phone

68.

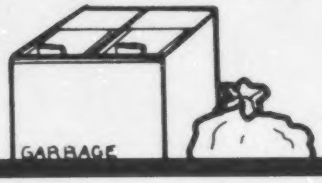
GARBOLOGY

Some researchers are studying garbage. They are looking at Americans' disposal behavior. In analyzing disposal behavior, researchers look at what people throw away and determine what could be used or reused. Statistics say that 10 pounds of goods per person per day are thrown away in the United States. This includes annually:

100 million	rubber tires
9 million	automobiles
30 million	tons of paper
4 million	tons of plastics
48 billion	cans
26 billion	bottles

Directions:
For one week go through the trash and garbage thrown away by your family or ask each family member to record what they throw away. Summarize the results below. For each item, indicate how your family could recycle or reuse it to reduce waste.

Amount	Ways to Recycle or Reuse
Cans (no.)	
Bottles (no.)	
Plastics (lb.)	
Paper (lb.)	
Food (lb.)	
Other	



69.

SERVICES AND YOU

Directions:
List 10 services provided by others that you and/or your family use. (Examples: automobile repairs, barber or beautician services.) Place a check (✓) in the middle column if the service could be provided by you or by a member of your family. Place a dash (–) in the middle column if the service could not be provided by a family member. In the column on the right, explain why a member of your family could or could not provide the service.

Services	Provided by Family or Not	Why Family Member Could or Could Not Provide the Service
1.		
2.		
3.		
4.		
5.		
6.		
7.		
8.		
9.		
10.		

ANSWER KEYS

ACTIVITY 16

Right to:	Explanation of Violation
1. Be Informed	The information given in the ad is false.
2. Be Heard	Lack of response to the consumer's letters indicates that his/her complaint is not being listened to.
3. Safety	The bugs are a potential danger to the consumer's health.
4. Redress	The consumer is unable to get compensation for the damage done to the car.
5. Choose	The consumer is not able to choose among alternative forms of transportation.

ACTIVITY 18

Answers may vary. This is an example of what the letter should include.

2911 Main Street
Somewhere, USA 31729
(800) 593-0071

May 18, 198–

Ms. P.R. Otector
Consumer Relations Director
Name Brand Jean Company
11934 Broadway
Any Town, USA 90775

Dear Ms. Otector:

I purchased a pair of Name Brand Jeans from Some Department Store on May 10. After washing the jeans according to the care instructions, the jeans shrank three inches in length. They are now much too short for me to wear.

I have already brought the problem to the attention of the salesperson, a department manager, and the store manager of Some Department Store. The store manager told me the store would be unable to do anything about the jeans and suggested that I write to you.

I would like for the company to replace the jeans and pay for the cost of mailing the jeans back to the company.

Sincerely,

Connie Zummer

Enclosure: Copy of receipt

ACTIVITY 19

Consumer Responsibility	Explanation
1. Choose carefully.	The Dickensons should have bought a different toy for their daughter. A two-year-old should not be given toys that have parts small enough to put in their mouths and swallow.
2. Speak up.	Jeremy should have returned the meat to get a refund or fresh meat. Stores need to know when and why consumers are dissatisfied.
3. Use products safely.	Maria should have installed the infant seat according to the instructions. Products should be used as intended.
4. Seek redress.	Crystal should have spoken to the department manager and then the store manager if her complaint wasn't resolved. She needed to follow through on her complaint until she received the desired results.
5. Use information.	David needed to check different stores to find out what features he could get for different prices. He didn't use information which was readily available to him.

ACTIVITY 26

1. **Insulate**—prevents heat loss in the home.
2. **Solar heating**—a heating alternative which does not use petroleum energy.
3. **Trees**—provide a windbreak, prevent heat loss, and provide shade to prevent heat gain.
4. **Color schemes**—create an illusion of warmth or coolness which helps one feel more comfortable at lower or higher temperatures.
5. **Thermostat**—raising the thermostat setting in summer and lowering it in winter reduces energy use.
6. **Storm windows**—reduce heat loss.
7. **Hot water heater jacket**—insulates the hot water heater to prevent heat loss and thus reduces the cost of heating water.
8. **Ceiling fans**—circulate warm or cool air and help one to feel more comfortable at lower or higher temperatures.
9. **Shade**—exterior shading devices like trees, trellises, louvers, awnings, shutters, solar screens, solar films, or roof overhangs protect the inside of a house from solar heat gain.
10. **Fluorescent lighting**—uses 3 to 5 times less energy than incandescent lighting.

ACTIVITY 34

Across

2. bit
3. byte
4. input
7. microcomputer
9. disc
13. CPU
14. CRT
15. program
16. memory
17. file
18. network

Down

1. microprocessor
3. BASIC
5. peripheral
6. I/O
8. Chip
10. FORTRAN
11. output
12. access
19. K

ACTIVITY 44

Cartoon A:

1. The consumer has so many coupons that she cannot find the ones which apply to her purchases.

2. Organization of coupons will enable the consumer to locate the right coupons quickly which saves time for both the consumer and the salesperson.

3. Set aside a specific drawer or box for storing coupons, proof-of-purchases, and refund offers.
   File coupons, refund offers, and proof-of-purchases separately.
   File coupons alphabetically by product categories.
   Highlight expiration dates and check them periodically.

Cartoon B:

1. The consumer is confused because he has to decide which savings and product is best for his needs.

2. **Brand A –** .79÷12 = .0658
   Brand B – (.79÷.30) –12 = .0483
   Leading Brand– (.85÷.15) –12 = .0500
   Store Brand – .59÷12 = .0492
   New Brand – .69 ÷(6+6) = .0574
   Generic – .59÷16 = .0369
   Least Expensive – Generic
   Most Expensive – Brand A

3. Size of container
   Quality of product
   Possibility of future purchases
   Curiosity about new product

ACTIVITY 45

FORM A

Product—Diamond Limon Carbonated Fruit Punch
Size—32 oz.
Expiration Date—December 31, 1988
How to Use—Take the coupon to the grocery store. Select a 32 oz. bottle of Diamond Limon Carbonated Fruit Punch. Give the coupon to the checker when you check out and you will not be charged for the fruit punch.

FORM B

Product—Mr. Cod's Famous Fish Fillets
Size—20 oz.
Expiration Date—May 9, 1990
How to Use—Send the proof-of-purchase emblems from specially marked packages of Mr. Cod's Famous Fish Fillets and a 3" by 5" card with your name and address printed on it to: Fish Offer, P.O. Box 958, White Salmon, ME 21953.

FORM C

Product—Fresh 'N Bright toothpaste
Size—10 oz.
Expiration Date—No expiration date given.
How to Use—Fill in the information requested on the back of the form. Send the form and the product code and label from the packages of three 10 oz. tubes of Fresh 'N Bright toothpaste to receive a coupon good for one free 10 oz. tube of Fresh 'N Bright toothpaste.

FORM D

Product—Swiss Fudge Chocolate Sauce
Size—15 oz.
Expiration Date—No expiration date given.
How to Use—Take the coupon to the store. Purchase a 15 oz. jar of Swiss Fudge Chocolate Sauce. Give the coupon to the checker when you check out to receive the 40¢ discount.

ACTIVITY 47

Answers may vary. Be sure you have good reasons for choosing the product.

1. A. The unit price is .0625¢ per oz. for the generic brand rice and .099¢ for the name brand rice.
   B. Bob should buy the 12 oz. box of generic rice.
   C. The generic rice is less expensive. Also, if some of the pieces are broken, it won't matter since it won't be noticeable in a casserole.
   D. The name brand might be preferred if the rice is used as a side dish and appearance is important.

2. A. The unit price is .0417¢ per oz. for the irregular pieces generic brand peaches and .0468¢ for the sliced name brand peaches.
   B. Carmen should buy the sliced cling peaches.
   C. These peaches will be of uniform size and shape and will look more attractive in a salad than peaches that are not uniform.
   D. The generic peaches would be fine to use when appearance wasn't important or the person had time to cut the pieces into roughly similiar shapes.

3. A. The unit price is .0038¢ per towel for the generic brand paper towels and .0107¢ for the national brand paper towels.
   B. They could buy a roll of each and use the generic brand in the workshop and the national brand in the kitchen.
   C. The national brand might be best to use in the kitchen for wiping up spills since it is more absorbent. Jill and Todd might be more satisfied with using the generic brand in the workshop because it is less expensive and may be used satisfactorily in the workshop.
   D. Other preference explained in B.

4. A. The unit price is .0050¢ per tablet for the generic brand aspirin and .0159¢ for the national brand aspirin.
   B. Jack should buy the generic brand of aspirin.
   C. All aspirin contain the same ingredients. The generic brand costs less.
   D. No reason to prefer the national brand.

ACTIVITY 62

1. Ecology
2. Do-it-yourself
3. Simple
4. Cooperation
5. Environment
6. Voluntary
7. Fulfillment
8. Enjoyment

ACTIVITY 67

1. D
2. F
3. H
4. E
5. B
6. C
7. A
8. G

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